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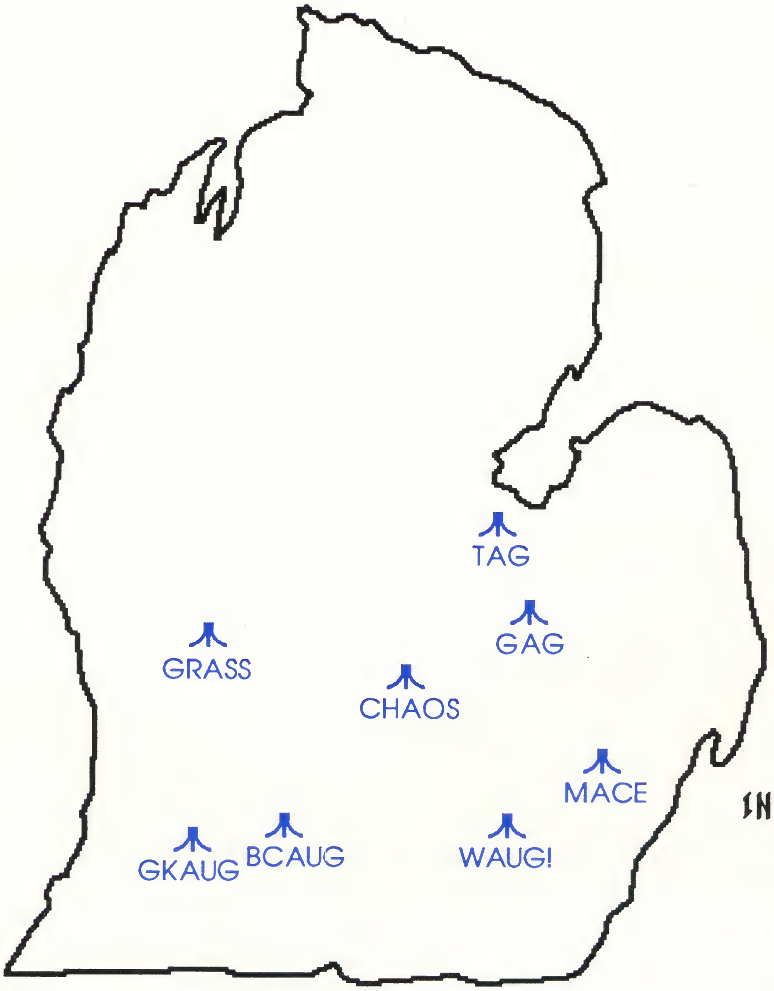
Michigan Atari Magazine

Your Atari Interface



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MAM this Month

Vol. 3, No. 1
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Michigan Atari Magazine (MAM) is the official newsletter of several independent Atari user groups and is not affiliated with Atari Corporation in any way.

From the Editors' Desks

We hope everyone had a pleasant and safe holiday season. We heard lots of comments about the last issue of MAM – most of them ranging from "looks real good" to "Wow!!" If anyone has any criticism or complaints about the magazine, please don't hesitate to let us know. Either leave a message on the Treasure CheST BBS (313)973-9137 or send your "Letter to the Editors" to us with your club's monthly submissions. Also, let us know if there is something in particular you'd like to see in the magazine – an interview with a particular person, a continuing column or whatever.

Our apologies for the lateness of the December issue. We were a few days behind our hoped-for schedule because of some problems we ran into on the printing end. Part of this was because it was our first time through (now we know what we're in for) and the Thanksgiving holiday caused problems for the Printers (now they know what they're in for!). This month, we had the Christmas holiday, but we were better prepared for it!

In this issue, we have some very good articles, including another superb hardware-related submission from Don Neff, president of MACE. This month's submission deals with adding a speaker to your "deaf" modem. He tells us that he plans to continue submitting these gems and he's already working on next month's article! The "On the Fritz" column also has hardware tips for both the ST and 8bit Atari owners. Bob Fritz, an authorized Atari serviceperson, is eagerly awaiting next month's questions, so let's keep them coming!

On the programming end, we have a little something for everybody (hopefully!). From Bob Retelle, we have an ST GFA Basic program that will format 2 disk drives simultaneously. For all you 8bit programmers who wish to copy protect your BASIC programs, Mike Olin (WAUG! President) has supplied some "basic" protection schemes.

There's lots more, but we'll quit telling you about it and let you get to it...

Last month we managed to only get to one user group's general meeting, and we'd like to thank TAG for their warmth and hospitality. This is fair warning to BCAUG and CHAOS (the only two we haven't visited) – don't be surprised if we show up at your next meeting!!

ATARI NEWS AND COMMENT

Editorial By Bill Rayl

Products, Products, Products

Since the arrival of the MEGAs in the stores, other Atari equipment which we've been waiting months to see is now appearing as well. The XEP-80 80 column adapter is out (see the XEP-80 review elsewhere in this issue). There have also been reports of the XF551 appearing in stores on the West Coast (without A-DOS which will supposedly be put into the public domain when it is ready).

The Laser is reportedly also "out the door," but there are some catches. First, it is not Postscript compatable, due to the high cost of licensing which Atari doesn't wish to pay. Another little problem is the interface box, which has two DMA ports, allowing for use of a Hard Drive with the Laser. It seems that the interface draws power from the Laser, so you need to have the Laser turned on at all times that you wish to use the hard drive. Hmm...

Supplies of 520 and 1040 STs have begun to dwindle in some areas, possibly due to Atari's push to get the MEGAs and other hardware out by Christmas. Or, maybe they've cut back the supply of STs in hope of pushing the MEGA sales? Naw. Regardless, if you plan to purchase an ST as a Christmas gift (!), I hope you'll be able to find one. Some dealers were smart and bought early for Christmas, so you may not have any problems at all.

In the June WAUG! Newsletter, I reported that Supra Corp. was working on a hard drive with a 10 MEG removeable disk. Well, Supra has finally announced just such a drive! If you have need for the capacity of a hard drive, but want the flexibility of a floppy then this may be just for you. The drive has an average seek time of 80ms and connects to the STs DMA port. No price has been announced at the time this information came to me. Wonder if they could be talked into making it connect to the 8bit, as well? Looks like I'll have to give Supra a call!

On the Software Side

There has been a lot of interest in Word Perfect for the ST, or at least a lot of talk. With a price tag of $295, not everyone will be rushing out to get it, but the $99 student and educator price is a steal for this software. What would you 8bit owners say if you could get Word Perfect on the 8bit Ataris? It may be easier than you think.

According to the program's author, Jeff Wilson, if Word Perfect Corp. received 10,000 signatures requesting the software, they "could be convinced to being development on an 8bit version." Wilson says he estimates that he could get the package done in about six months once he got the go-ahead on it.

If you would like to see Word Perfect on the 8bit Atari (along with the possible ramifications to other software manufacturers!!!), send a letter to Word Perfect Corp., c/o Marketing Dept., 288 West Center Street, Orem, Utah 84057. Better yet, why not have your club start a petition!

On to darker corners... Gordon Monnier of Michtron raised some eyebrows with his offer of $200 cash or $400 worth of software as a reward for confirmed pirate BBSes with Michtron software. It seems the response to his offer was a bit more than he expected, with nearly 80 confirmed BBSes with pirated Michtron programs on-line. Monnier withdrew his offer soon afterwards and is now in the process of taking legal action against the more notable pirate boards.

According to the December '87 issue of Compute's ST, Michtron's attorneys have even filed suit against the parents of one New York minor who was running a pirate board. The suit claims that the parents contributed to the infringement of copyright laws by their lack of supervision and by supplying the hardware and phone line used by the minor. WOW! That should make some people think twice about putting non-public domain software out for download.

How to Use the Merit Network (Part I)

by John Perry, Jr.

Atari-specific info added by Bill Rayl

Thanks to Nick Holland, Jack Daugherty and the users of his Tandy Harbor BBS, and my brother, Matthew Perry. Also to Microsoft Word 3.0, Wordstar 3.3, Sidekick, and the Selfware, Inc. "STRIP" program.

Introduction

I stumbled into the Merit Network almost by accident. Someone told me how it could be used to call bulletin board systems in the Ann Arbor area, without getting stuck with big telephone bills. (Thanks, Nick!) From there I was pretty much left on my own, to use the system as best I could.

There was no documentation. There was a support telephone line, but the daytime phone rates from

Houghton to Ann Arbor are roughly on the same scale as calls to Europe, and I'm a college student with too little income. Until recently I couldn't afford to call Ann Arbor from the Upper Peninsula just to ask questions. I picked up information about Merit slowly, through folklore, and passed on as much as I could to other people.

I call a *lot* of BBSes, though. I have an index card with about 20 phone numbers in the Ann Arbor area that I use regularly. And I've been asked questions about Merit on most of these BBSes (and answered them, and been asked more questions ...)

Here's five months of condensed wisdom. If you want to add to or correct it, that's fine with me. *Please* leave me a message on a BBS somewhere, telling me what you've changed/added! There's a lot about this system that I don't know yet. Also, any information about using Merit ought to be passed on to everyone that's interested.

I will distribute all revisions of this file to all of the BBSes I use, and hopefully everyone can keep more or less up to date on this information.

The purpose of this file is to provide people with the information necessary to allow them to connect with Ann Arbor area BBS services for free. It is possible not only to leave ASCII messages and use ASCII files, but to upload and download programs using such transfer protocols as XMODEM, YMODEM, KERMIT, SEALINK, and MODEM7.

The Merit Computer Network

The Merit Computer Network is a network of educational computers in Michigan. It is primarily designed to allow people in one part of the state to call university mainframe computers in other parts of the state, and use the computers as if they were logged on through a terminal connected to the machine.

For example, a student of Michigan State could visit relatives in Cheboygan for the weekend. If he called his university mainframe through Merit, he could complete his programming homework on the university mainframe while he was in Cheboygan.
For another example, a researcher at Michigan Tech could be performing intricate physics research and need the services of a bigger, faster computer than the IBM 4381's and VAX computers available at Michigan Tech. He could call U-M and connect to their powerful HNC (Hypothetical New Computer, which I just made up), and complete the necessary part of his research on that system.

Merit is what is called a "packet switching network". This means that all of the data being sent to Merit by all of the various users is saved up until Merit has a "full packet". (If Merit doesn't get a full packet after a certain period of time – a second or two, probably, it just sends what it has as a "short packet".)

The process of saving up information for a packet is part of why Merit seems to send data to you in short bursts. (It really is sending you information in short bursts.) If this sounds confusing, don't worry. You don't have to understand it to use Merit to connect to Ann Arbor BBS systems.

What this basically means is that sometimes it will seem as if a BBS is not echoing data back to your terminal very quickly. Don't worry. You don't have to wait for a character to echo before you can type the next character. (If you do that, sometimes you will spend more time waiting than typing!) If you are really bothered by this "feature," set %reader=off (see instructions in Part II of this article next month).

Connecting with Ann Arbor

It is possible to connect with Ann Arbor bulletin boards without paying long distance telephone fees, if you are within local calling range of a Merit node. There is a complete list of all nodes at the end of this article. They are available to people in most parts of Michigan as local telephone calls.

To connect with Merit, you must have your terminal (the program that runs your modem -- Flash!, ST-Term, Express, Amodem or whatever) set to the proper parameters.

Data Bits	7 (or 8 – see section on modem break)
Parity	EVEN (or NONE – see section on modem break)
Stop Bits	1
Duplex	FULL
Baud rate	300 or 1200 depending on your modem and the baud rate of the node which you will be calling.

If you intend to call Ann Arbor area bulletin boards, you will only be able to connect at 300 or 1200 baud through the Merit system. Merit is currently planning on adding 2400 baud access in the very near future, as well as adding Hayes commands accessible by callers. More on this in a future update.

You need to find a node that is near enough to you to be a local telephone call. Make sure your terminal parameters are set to the correct settings, then call the Merit number as if it were an ordinary BBS. For a list of nodes and the cities they are in, see the section titled "Michigan Merit Numbers (in Part II)."

➡

When you have received a carrier from the Merit node, you will have to hit <return> a couple of times. This will tell the Merit node what baud rate you are using to call. You will see a couple of lines of information printed, saying "Welcome to the Merit Computer Network", or some such, and identifying what baud rate you are using to call Merit. Then you will get a line that looks like:

```
%Terminal=
```

You can just hit <return> again, and your terminal type will be entered as "none". Terminal type is not important for the use of Merit as described in this manual. You can enter your terminal type if you wish (VT52, VT100, or whatever you use).

You will then get several more lines of information (some of it quite cryptic – don't worry about it. I never have!). [ED: A future update on Merit will include an explanation of these "cryptic" lines and how you can use some of this info to get more out of Merit.] Then you will see a line that looks like:

```
Which Host?
```

If you are calling at 300 baud, enter

```
DO300
```

or

```
DIAL300-AA
```

If you are calling at 1200 baud, enter

```
DO1200
```

or

```
DIAL1200-AA
```

There is no "do2400," just 300 baud and 1200 baud are supported at this time.

You have connected to a special "dial out" modem located on the campus of the University of Michigan, and connected to the Merit Network. You might get either of two results:

1. You might get a strange looking line of code, and the message "All DO300 ports are busy" (or "All DO1200 ports are busy"). There are lots of people trying to use this system. You just had the bad luck to call when someone else was using the dial out modems. You'll have to call back later.
2. You might get a strange line of code, followed by this:

```
Hello, I'm ready.
*
```

The asterisk (*) is the prompt that the dial-out modem uses to tell you that it's waiting for a command. When you get this response, you are ready to begin calling Ann Arbor area bulletin boards.

If you do not get either of these two responses, hit a control-E followed by a RETURN. That should force you into command mode.

There are only a few commands that you can give the dial out modem. They are as follows:

D – dial a specified number
R – redial a number previously dialed (up to 9 times)
I – idle, quit using the dial out modem
H – Help, a list of these commands

Since you've just connected to the dial out modem, you probably want to call a BBS. You need to pick out a board that seems interesting to you (there's a list of Ann Arbor area BBSes in Part II of this article, to appear in next month's issue). Type the following:

```
D<return>
```

The modem will ask you, "What Number?" Type:

```
9XXXXXXX
```

where the Xs represent the number you wish to call. For example, to call The Treasure CheST BBS, you could type:

```
D
99739137
```

The modem would automatically dial the number for you. If the Treasure CheST phone line was available, you would receive the following messages from the dial out modem:

```
Ringing ...
Answer Tone ...
Online ...
```

and you could proceed to log on to The Treasure CheST BBS. Ta Da! If the phone was busy, you would get the following message:

```
Dialing ...
Busy.
*
```

indicating the line was busy, and Merit's modem is ready for you to try another call. You might also get the following message:

```
Dialing ...
Ringing ...
Voice!
```

This might mean that you've called a number that isn't a BBS at all. (Maybe it was a BBS and the phone has been disconnected. Or maybe you dialed the phone number wrong.) It might also mean that Merit cannot connect to the BBS on the phone line. There are several problems that might cause this result. The BBS might not work at whatever baud rate you are trying to use to call it. (The BBS might be 2400 baud only, for example.)

You could dial another number by typing "D <return>", then "9"-(the BBS phone number) "<return>". Or you could redial the Treasure CheST number as many times as you wished until you got through. The dial out modem has a redial function.

To use the redial feature, you do the following:

```
R<return>
```

The dial out modem will respond with

```
How many times?
```

If you only want to redial once, you can just hit a <return>. If you want to redial more than once, you can respond with any number between 2 and 9.

When you're done using a particular BBS, just log off normally. The dial out modem will disconnect you from the DO300/DO1200 line automatically. You will return to the "Which Host?" prompt, and you can re-enter the dial out modem from there by typing "DO300" or "DO1200."

[ED: Due to the length of this article, Part II will be run in the February issue of MAM. Part II contains information concerning uploading and downloading via Merit, how to send a modem break, a list of Merit access nodes around the state and a list of Ann Arbor BBSes that you can access via Merit. Don't miss it!]

Bits of BASIC

by M. Olin (WAUGI, MACE)

'Protecting' Your Software

You say you've written a program, and you spent a lot of hours making it "just right?" You've written some pretty nice routines that you're quite proud of but you don't want just anybody to have access to it? Here's a couple of hints that might help you keep some prying eyes from viewing your work.

Disable the BREAK Key

The very first line of your program should look like this:

```
10 POKE 16,64:POKE 53774,64
```

Effectively we have told the computer to ignore the fact that the user is pressing the BREAK key. Therefore, the user cannot "break out" of the program and look at your code. But that's only the beginning. Any Atarian who has had his/her computer for more than 2 weeks should know that all you'd have to do is press RESET and we'd be back to Square 1.

Cold Starting

Add the following command to line 10, making sure to separate it from the previous commands with a colon (:).

```
POKE 580,1
```

Now, whenever the user presses the RESET key, the computer will act almost as if you had turned the

→

power off and back on again. In other words, it will "reboot" and the program that was running will be erased from memory.

So far so good! Now you need a routine that permits the approved users to have access to your program, but those persons you want to keep out will have to be "filtered" somehow. A "password" seems in order here.

```
   19 DIM PASS$(20)
   20 INPUT PASS$:IF PASS$<>"Your Password"
   THEN NEW:END
```

All persons who are using your program must know the password, which can be up to 20 characters long. Notice that it is upper/lower "case sensitive." If they enter it wrong, the program is erased from memory. Zip. Kaput. Gone. And just to make sure that "the enemy" can't discover your password by staring over your shoulder, we're going to make sure that the characters you type never appear on the screen.

```
   15 X=PEEK(559):POKE 559,0
```

This command will turn off the chip, called ANTIC, that drives your monitor. The screen will turn black with no visible text, and will remain in this state until you turn it back on again, which you will not do unless the proper password is entered in line 20. If the correct password is given, then this line will complete the job:

```
   25 PRINT "<ESC><SHFT-CLEAR>":POKE 559,X
   30 REM  Your program starts here.
```

Let's check our progress: The program won't run if they don't know the password. They can't RESET, and they can't press BREAK and LIST the program to look at your password. What's left?

We have to find a way to prevent the uninvited user from LOADing the program and LISTing the lines that contain your password, since none of the above commands will take effect until after the program starts running. This part gets a little tricky, so you will want to type it in *exactly* as it is written here. After your program is completed and "debugged" to your satisfaction, you need to add these lines. Note that your program *must not ever* GOTO or GOSUB to these lines.

```
   32761 BOTTOM=PEEK(131)*256+PEEK(130):TOP=
   PEEK(133)*256+PEEK(132)
   32762 FOR X=BOTTOM TO TOP:POKE X,155:
   NEXT X
   32763 FINISH=PEEK(139)*256+PEEK(138):POKE
   FINISH+2,0:SAVE "D:filename.ext":NEW
```

A word of caution: Make sure you SAVE a copy of your program before you continue with the following instructions. Store this copy in a safe place as it is the only copy that can *ever* be LISTed again. Not even the approved password user can LIST your program once these routines have been performed, so take good care of this "source" disk!

Ready? Make sure the disk on which you want the "protected" version of your program is in Drive 1, then type:

```
   GOTO 32761
```

and press <RETURN>. Here's what happens: the FOR/NEXT loop in line 32762 will cause all the variable names which are used in your program (and stored in the Variable Name Table) to be replaced with CHR$(155), the ATASCII carriage return. (Any other character can be used by placing its appropriate ATASCII value in the POKE statement in line 32762.) When this happens, the program can no longer be LISTed, nor can it be LOADed! In fact, the only way to LOAD and RUN this program ever again is by issuing the RUN "D:filename.ext" command from BASIC.

And there you have it! A reasonably good, but not absolutely perfect way to "protect" your software.

Multi-Disk, Multi-Drive Format Program

by Bob Retelle (MACE, WAUG!)

Whenever I buy a box of new disks, I usually format them all at once, so I don't get caught in the middle of something without a disk to save onto. Unfortunately, formatting disks has to be one of the most boring tasks known to man. Even the attempts to liven things up by putting 'R-Rated' pictures in the background of formatting programs hasn't really helped.

One of the things which really makes it annoying to format a quantity of disks is the length of time it takes to do one disk. It's long enough to be really boring to sit through, but not long enough to let you go do something else. If I wander away while a disk is formatting, I usually end up coming back 15 minutes later to find that the disk was finished for at least 12 minutes and I still have 9 more to go!

With this in mind, I wrote this formatting program after receiving the new GFA BASIC Book, from MichTron. The book takes you beyond the 'Basics,' into the inner workings of the ST and this program is built around a highly modified version of a format procedure from the book. With some help from the

GFA BASIC Companion, I had the program up and running very quickly... one of the nicest things about the GFA BASIC system.

The 'Multi-Disk, Multi-Drive Formatter' lets you format using BOTH disk drives, either alternately, or both at once. Thus you can put two disks in, hit RETURN and go do something useful while they format. (Note that it *does* require *two* disk drives to use.) The program does not speed up the actual formatting. It simply allows you to make better use of the time it takes to format disks.

You can choose among three different modes of operation. The first, "Prompted Formatting" will format the first disk, then pause until you press RETURN, giving you a chance to insert a disk into the other drive. The process will repeat, alternating the disk drives.

The second mode is "Continuous Formatting." With this option, the program keeps alternating drives automatically, without pausing. While it formats the first disk, it prompts you to insert the next, and automatically formats the second drive when the first is finished, back and forth.

The third mode of operation is probably the most useful. With "Simultaneous Formatting," you insert two disks and press RETURN. The program will format both disks at the same time, then ring a bell to call you back to pop in the next two disks.

Originally I wrote the formatter using the GFA BASIC Companion to create the text boxes and 'Radio Button' boxes, but the policy of Michtron and Marathon Computer Press is that the .LST routines created by the Companion can only be distributed in programs which are either Compiled or PSAVED (The Companion actually writes Procedures, or subroutines, which you Merge into your own program. It's an excellent time saver!).

For this version of the program, I used the coordinates which the Companion had calculated, and created far simpler text boxes for the various prompts. Instead of the Radio Button box for the formatting parameters, I just used a series of standard ALERT boxes.

To save space and typing time, the program is set up for a Color monitor, in Medium Resolution, but the coordinates for a Monochrome monitor are also given in comments. If you have a Monochrome monitor, simply substitute these numbers for the ones in the program. Also note that the formatting program will only run in Medium Resolution on a Color monitor.

You can choose from the standard selection of formatting parameters by selecting the appropriate buttons in the ALERT boxes. The choices include 9 or 10 sectors per track, 80 or 82 tracks per disk, and Single- or Double-sided formatting. The standard Atari format is 9 sectors and 80 tracks. By choosing more sectors and tracks, you can increase the amount of data the disk will hold, but at some risk of incompatibility and reliability. Additionally, some recent Atari disk drives will *only* format 80 tracks per disk. I *always* format at 10 sectors, 82 tracks and have never had a problem, but that doesn't mean that *you* won't.

The program defaults to 9 sectors, 80 tracks and Single-sided formatting, but the listing shows where you can change these defaults to customize the program for the parameters you prefer. That way, you can just hit RETURN at the ALERT boxes to choose the set-up you like best.

One last little feature I added was to customize the Mouse pointer into a Kitten, for a special friend. The GFA BASIC disk includes a Mouse/Sprite Editor which makes it extremely easy to add this little touch to your own programs. Unfortunately, all the ALERT boxes in this version cause the pointer to revert back to the default arrow shape, but it's enough to give you the idea.

Something I'd like to add in a future version of the formatting program would be a "Twister" format for faster reading of the disk, but that's a subject for another day!

As with any formatting program, use EXTREME CAUTION to avoid accidentally erasing any valuable program or data disks. It's best to keep these out of the area while you're formatting blank disks, just to be sure! (Source code begins on page 8 and can also be downloaded from the Treasure CheST BBS)

```
Rem  Multi-Disk, Multi-Drive Formatting Utility    V.1.0
Rem  By Bob Retelle,  December 1987
Rem  Requires GFA BASIC and TWO disk drives

Restart:
Rez=Xbios(4)  ! Rez=0=Low Rez,  Rez=1=Medium Rez,  Rez=2=High Rez
If Rez=0
  Alert 0,"  Sorry, the Formatter |     will only work in |MED or HIGH
  resolution..!",1,"Drat!",Button
  End
Endif

Drv%=1              !Start with Drive A  (will be reversed first time through)
Fat%=5              !5 File allocation table sectors allocated
Di%=112             !112 directory entries allowed
Disks%=1            !Count how many disks have been formatted

Define 1,5
Deftext 1,0,0,6     !For Hi Rez: 1,0,0,13

Gosub Makemouse     !Customize mouse pointer
Gosub Credits
Gosub Choices
Gosub Warning

Disk%=Disk%-(Auto=3)!If Option 3 is chosen, start with a count of 2

Do                  !Main program loop
  If Auto=3         !Format both drives simultaneously
    Drv%=0
    Gosub Prompt2
    Gosub Format
    Gosub Prompt3
    Inc Disks%
    Key=Asc(A$)
    Goto Action
  Endif
  Drv%=Abs(Drv%=0)  !Alternate Drives
  If Auto=2         !Option 2, automatic alternating of drives
    Gosub Prompt
    Print Chr$(7);  !Ring the bell
    Gosub Format
    Goto Action
  Endif

  Cls               !Option 1, prompted alternating of drives
  Print Chr$(7);    !Ring the bell
  A$="    Drive A"
  If Drv%
    A$="    Drive B"
  Endif
  Alert 0,"  Ready to FORMAT|"+A$+"|Insert new disk and|     press
  RETURN",1,"FORMAT|Abort",Button
  If Button=2
    Goto Abort
  Endif
  Gosub Prompt
  Gosub Format

  Action:
  If Key=27         !Quit if ESC has been pressed
    Goto Abort
  Endif
  Inc Disks%        !Count total disks formatted
Loop

Abort:
Cls
Alert 0,"     All done?     ",1,"Yes/Quit|Restart",Key
If Key=2
  Clear
  Goto Restart
Endif
End
Rem ########### CREDITS procedure ##############
Procedure Credits                                    !HI REZ:
  Rbox 100,20,540,170                                !100,20,540,290
  Text 188,45,"MULTI-DRIVE, MULTI-DISK FORMATTER"    !188,50
  Text 260,65,"By Bob Retelle"                       !260,89
  Text 156,85,"Written with GFA BASIC, the GFA BASIC BOOK"   !156,133
  Text 228,95,"the GFA BASIC COMPANION"              !228,155
  Text 196,115,"Requires TWO floppy disk drives"     !196,199
  Text 204,125,"either Single or Double sided"       !204,221
  Text 292,145,"V. 1.0"                              !292,265
  Repeat
    A$=Inkey$
    K=Mousek
  Until K=1 Or Asc(A$)       !Wait until mouse button or key is pressed
  Pause 10
  Cls
Return
Rem ########### CHOICES procedure ##############
Procedure Choices
  Alert 0,"  Do you want to|Format with 9 or 10|sectors per
  track?",1,"-9-|-10-",Button
  Rem    ^ Change this number to 2 to default to 10 Sectors per Track
  Spt%=9-(Button=2)

  Alert 0,"  Do you want to|format with 80 or 82|    tracks per
  disk?",1,"-80-|-82-",Button
  Rem    ^ Change this number to 2 to default to 82 Tracks per disk
  Trk%=80-2*(Button=2)

  Alert 0,"Do you want to|format Single or|Double
  sided?",1,"SINGLE|DOUBLE",Button
  Rem    ^ Change this number to 2 to default to Double Sided
  Sid%=1-(Button=2)

  Alert 0,"     Do you want PROMPTED,| CONTINUOUS or
  SIMULTANEOUS|      formatting?",1,"PROMPT|CONT|SIMUL",Auto
Return
Rem ########### WARNING procedure ##############
Procedure Warning                                    !HI REZ:
  Rbox 100,20,540,170                                !100,20,540,320
  Text 220,35,"*** STANDARD WARNING ***"             !220,40
  Text 244,65,"FROM THIS POINT ON"                   !244,89
  Text 284,75,"* ANY *"                              !244,111
  Text 212,85,"DISK IN EITHER DRIVE A OR B"          !212,133
  Text 284,95,"WILL  BE"                             !284,155
  Text 276,105,"* ERASED *"                          !276,199
  Text 196,125,"BE SURE THAT YOU HAVE REMOVED YOUR"   !196,121
  Text 274,135,"PROGRAM DISK"                        !274,243
  Text 168,145,"AND ARE READY TO PROCEED WITH FORMATTING"
                                                          !168,265
  Text 258,155,"YOUR BLANK DISKS"                    !258,287
  Wait:        !Wait until mouse button is pressed, or any key press
  Repeat
    A$=Inkey$
    K=Mousek
  Until K=1 Or Asc(A$)
  Pause 10
  Cls
Return
Rem ##################PROMPT PROCEDURE#############
Procedure Prompt                                     !HI REZ:
  Rbox 150,20,490,140                                !150,20,490,260
  Text 232,45,"INSERT NEW DISK INTO"                 !232,57
  D$="DRIVE A"
  If Drv%=0
    D$="DRIVE B"
  Endif
  Text 286,55,D$                                     !286,79
  Text 232,75,"SO IT CAN BE FORMATTED"               !232,123
  Text 254,85,"WHEN THE DISK IN"                     !254,145
  A$="DRIVE B"
  If Drv%=0
    A$="DRIVE A"
  Endif
  Text 286,95,A$                                     !286,167
  Text 272,105,"IS FINISHED"                         !272,189
  Text 244,115,"(PRESS ESC TO QUIT)"                 !244,211
  Text 224,125,"Total disks formatted="+Str$(Disks%)    !224,233
```

```
Return
Procedure Prompt2
 Cls
 Rbox 150,20,490,85                            !150,20,490,140
 Text 262,45," **STAND BY**"                   !262,57
 Text 222,65,"NOW FORMATTING BOTH DRIVES"      !221,101
Return
Procedure Prompt3
 Cls
 Rbox 150,20,490,85                            !150,20,490,140
 Text 272,45,"SWITCH DISKS"                    !272,57
 Text 222,55,"PRESS ANY KEY TO CONTINUE"       !222,79
 Text 244,65,"(PRESS ESC TO QUIT)"             !244,101
 Repeat
  Print Chr$(7);
  A$=Inkey$
  Pause 15
 Until Asc(A$)
Return .
Rem ################ FORMAT PROCEDURE ################
Procedure Format         !Based on GFA BASIC Book from MichTron
 X=55-24*(Rez=2)         !Position for printing message
 Buf$=String$(20000,0)   !Buffer to hold Boot Sector info
 Void Fre(0)             !Make sure String doesn't move
 Buf%=Varptr(Buf$)       !Find start of buffer
 For T%=0 To Trk%-1
  For S%=0 To Sid%-1
   If Auto=3
    Drv%=0
   Endif
   Print At(28,18);"Formatting Side ";S%+1;", Track ";T%;" ";
   If Auto<>3
    If T%/2=Int(T%/2)                  !Flash next Drive message
     Text 286,X,D$
    Else
     Text 286,X,"        "
    Endif
   Endif
   Otherdrive:
   E%=Xbios(10,L:Buf%,L:0,Drv%,Spt%,T%,S%,1,L:&H87654321,0)
                                                !Format call
   If E%
    Print At(26,19);"Error formatting Side ";S%+1;" Track ";T%;
   Endif
   If Auto=3 And Drv%=0
    Drv%=1
    Goto Otherdrive
   Endif
  Next S%
 Next T%
 Gosub Boot
 If Auto=3
  Drv%=0
  Gosub Boot
 Endif
 Key=Asc(Inkey$)
Return
Procedure Boot
 Rem Create Boot Sector information in Buffer$
 Sec%=Trk%*Spt%*Sid%
 Buf$=String$(6,0)+Mkl$(Xbios(17))+Chr$(0)+Mki$(2)+Chr$(2)
 Buf$=Buf$+Mki$(&H100)+Chr$(2)+Chr$(Di%)+Chr$(Di%/256)
 Buf$=Buf$+Chr$(Sec%)+Chr$(Sec%/256)+Chr$(Med%)
 Buf$=Buf$+Mki$(Fat%*256)+Mki$(Spt%*256)+Mki$(Sid%*256)
 Buf$=Buf$+Mki$(0)+String$(512,0)
 Void Xbios(9,L:Varptr(Buf$),L:0,Drv%,1,0,0,1)
 Void Bios(7,Drv%)
 Buf$=Mkl$(&HF7FFFF00)+String$(508,0)
 Void Bios(4,1,L:Varptr(Buf$),1,1,Drv%)
 Void Bios(4,1,L:Varptr(Buf$),1,Fat%+1,Drv%)
Return
Rem ############ MAKE MOUSE PROCEDURE ###############
Rem From Mouse Editor provided with GFA BASIC
Procedure Makemouse
 Let Mouse$=Mki$(0)+Mki$(3)+Mki$(1)
 Let Mouse$=Mouse$+Mki$(0)+Mki$(1)
 For I%=1 To 32
  Read Byte
  Let Mouse$=Mouse$+Mki$(Byte)
 Next I%
 Data 7224,8184,8184,32190,24570,32766,4080,4080,8184,16380,16380,16380,
  16376, 8176,4092,2044
 Data 2064,3120,4080,3504,16380,2016,2016,2016,4080,8184,8184,8184,4080,
  2016,512,1016
 Defmouse Mouse$
Return
```

Silicon Spelunking

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As with many tasks on the ST, working with the RS-232 port is both much easier and much harder than with the 8bit. On the upside, you don't need to purchase an interface – it is built right in. You don't have to worry about programming for 3 or 4 different handlers (850, R-Verter, MPP, 1030) and there aren't as many quirks – No longer must you worry about opening and closing the R: device during serial I/O. The price you pay for this is the sacrifice of device independance and a somewhat less intuitive approach to programming. The ST BIOS supports the RS-232 port as a numbered device – always open, always ready. You need only know how to configure it to your needs (baud rate, parity, duplex, etc) and communicate with it.

There are only 4 routines you need to be familiar with to get much of the work done. Rsconf to configure the RS-232 port; Bconstat to see if a character has been received on a device; Bconin to get a single character; and Bconout to send a single character.

void Rsconf(baud, ctrl, ucr, rsr, tsr, scr)

Rsconf is an XBIOS call that takes 5 parameters, only 3 of which are useful in setup. These are baud, ctrl and ucr. Baud may take on values between 0 and 15 and ctrl values from 0 to 3. UCR is the USART control register and requires the setting of individual bits.

I usually set ucr to 0x88 which is short for no parity, 1 start bit, 1 stop bit, 8 data bits. All other parameters should be set to -1 so that they will not be changed by the call.

baud	Baud rate	ucr bit	Purpose
0	19200	0	unused
1	9600	1	0=odd parity, 1=even
2	4800	2	0=no parity (ignore bit 1)
3	3600		1=use bit 1
4	2400	4,3	00=0 start, 0 stop
5	2000		01=1 start, 1 stop
6	1800		10=1 start, 1.5 stop
7	1200		11=1 start, 2 stop
8	600	6,5	00=8 bit word
9	300		01=7 bit word
10	200		10=6 bit word
11	150		11=5 bit word
12	134	7	0=Take frequency from TC/RC
13	110		(Synchronous)
14	75		1=Use (TC+RC)/16
15	50		(Asynchronous)

ctrl	Meaning	ctrl	Meaning
0	No handshaking	1	XON/XOFF
2	RTS/CTS	3	Both XON/XOFF and RTS/CTS

int Bconstat(dev)

Bconstat is a BIOS routine that returns a status for the device you specify. A return of 0 indicates that there are no characters ready to be read from the device and a return of -1 indicates that there are one or more characters ready. As with Bconin and Bconout, the following device numbers are used:

dev	Device
0	Printer interface
1	RS-232 interface
2	Keyboard/screen
3	MIDI interface
4	IKBD

Bconin(dev)

Bconin simply reads a character from the specified device. It does not check for control-C or any other special character, and does not return until it has read a character, so you may find it useful to call Bconstat to see if there is a character ready before you call Bconin to get the character.

int Bconout(dev,c)

Bconout sends the character c to the specified device. The function returns as soon as the character is output. Note that on a buffered device, this will return as soon as it is registered in the buffer, not when it has actually been sent to the device.

In addition, it is very useful to be able to set or detect the state of, various lines such as DTR (data terminal ready), CD (carrier detect), CTS (clear to send), and RTS (request to send). What follows is a brief description of each. Both DTR and RTS are controlled by the General Instruments sound chip while CD and CTS are functions of the MFP68901 multi-function peripheral chip. Take a look at the example program for the actual calls.

DTR

The DTR line is used to tell your modem if you are ready for I/O or not. A side benefit of this is that if you tell the modem you are not ready, it will drop carrier and not accept calls until it is again told you are ready. You can set or clear the DTR line via Ongibit and Offgibit.

CD

The CD (carrier detect) line is used to tell if your modem has a carrier -- i.e. it has connected with another modem. You can read this line via peeking a memory location.

CTS/RTS

The clear to send line is also read from a memory location, but is of limited use when working with modems. CTS and RTS are both primarily used in the handshaking of serial printers where CTS indicates that it is ok to send a character and RTS tells the computer that it no longer has to wait. RTS can be set in the same manner as DTR.

Finally, it can be very useful to see the current settings of, or change the settings of the I/O buffers. This is achieved via the Iorec call.

long Iorec(dev)

Iorec is a tricky call. Not only is dev numbered differently for this function than with the BIOS routines, but it also appears to return nothing of much use. In fact, it returns a pointer to a structure that can tell you all about the devices input and output buffers. All of the devices supported by this call have input buffers, and the RS-232 device also has an output buffer which is located right after its input buffer. To make use of this call, you must define a pointer to the needed structure and then use Iorec to set the pointer. From then on you can check the values of the structure, or even set them, by referring to the fields in the structure. The values for dev are:

0	RS-232
1	Keyboard
2	MIDI

Putting it All Together

Perhaps the best way to see how this all fits together is with a simple terminal program. Even the simplest terminal program addresses the questions of how to configure the port, send and receive data, and play around with some of the RS-232 lines. In this month's example you can also see how to handle duplex and echoplex in your code.

To get a working program out of this, you need to type in and compile the two separate parts, RS232.C and TERM.C using the MegaMax C compiler. If you have another compiler, simple adjustments may be neccessary.

If you would like to download the text of this article, or the example program, or just want to discuss ST programming – call the Neon Brain at 313/747-6260 and 'join atari.' You can reach it via Merit.

Suggested Reading: ATARI ST Internals, Abacus book #2

Next Month: Working with the joystick and mouse.

```
/* RS232.c - RS232 line handling functions for the ST
 *  by Bill Root, Brian Hall
 *  Copyright (c)1987 Innovision
 * Created 08/10/87
 * Updated 12/16/87   */
#include <stdio.h>
#include <osbind.h>
#include "defs.h"
#define IOPORT 0xfffa01

struct iorec {
  BYTE *io_buf;
  WORD io_bufsiz;
  WORD io_head;
  WORD io_tail;
  WORD io_highwater;
  WORD io_lowwater;
} *iop;
BYTE peek(addr)
  long addr;
{
  long stack = 0;
  static BYTE theByte;
  char *place;
  stack = Super(stack);
  place = (char *) addr;
  theByte = *place;
  Super(stack);
  return theByte;
}

/* cts returns the status of the clear-to-send line  */
cts( )
{
  return ( !(peek(IOPORT) & 0x04) );
}

/* cd returns the status of the carrier detect line */
cd()
{
  return ( !(peek(IOPORT) & 0x02) );
}

/* dtr sets the data-terminal-ready line to that of state */
dtr(state)
  register int state;
{
  if (state) Offgibit(0xef);
  else Ongibit(0x10);
}

/* rts set the request-to-send line to that of state */
rts(state)
  register int state;
{
  if (state) Offgibit(0xf7);
  else Ongibit(0x08);
}

/* Reduce the size of the AUX buffer
 * Must use 0 for Iorec because of DAMN OS Inconsistency! */
kill_buf( )
{
iop = (struct iorec *) Iorec(0);
iop[1].io_head = iop[1].io_tail = 0;
iop[1].io_bufsiz = 1;
}
```

```
/* Term.c - A simple terminal program
 * by Brian Hall
 * Copyright (c)1987 Innovision
 * Created 08/14/87
 * Updated 12/19/87 */
#include <stdio.h>
#include <osbind.h>
#include "defs.h"

int
  echoplex,        /* Echoplex on/off flag */
  duplex,          /* Full/Half duplex flag */
  baud,            /* The current baud rate */
  max_baud=1200;   /* The max rate, also the starting rate */

/* flush any input from the RS-232 port */
aux_flush( )
{
  while (Bconstat(AUX))
  Bconin(AUX);
}

/* this function pauses for the specified number
  of 1/200 seconds */
delay(time)
  int time;
{
  long stack = 0;
  register long ltime;
  ltime = (long) time;
  stack = Super( stack );
  asm {
    move.l 0x4ba, D0
    add.l  ltime, D0
    loop:
    cmp.l  0x4ba, D0
    bge    loop
  }
  Super(stack);
}

/* Code to hangup the modem */
hangup( )
{
  dtr(FALSE);
  delay(100);
  while (cd());
  dtr(TRUE);
}
/* This will set AUX to the passed rate, or 300 (default) */
int set_baud(rate)
  int rate;
{
  static int rates[ ]={
    19200, 9600, 4800, 3600, 2400, 2000, 1800,
    1200, 600, 300, 200, 150, 134, 110, 75, 50 };
  int val;
  switch (rate) {
    case 19200: val=0; break;
    case 9600: val=1; break;
    case 4800: val=2; break;
    case 3600: val=3; break;
    case 2400: val=4; break;
    case 2000: val=5; break;
    case 1800: val=6; break;
    case 1200: val=7; break;
    case 600: val=8; break;
    case 300: val=9; break;
    case 200: val=10; break;
    case 150: val=11; break;
    case 134: val=12; break;
    case 110: val=13; break;
    case 75: val=14; break;
    case 50: val=15; break;
    default: val=9;
  }
  Rsconf( val, 0, UCR, -1, -1, -1);
  delay(30);
  aux_flush();
  baud=rates[val];
  return baud;
}

termhelp()
{
  puts("\nKey    Function");
  puts("—    ————————");
  puts("HELP   Print this list");
  puts("UNDO   Return to Plexus");
  printf("F1     Change baud rate (%d)\n",baud);
  printf("F2     Toggle Duplex ");
  if (duplex) puts("(Full)");
  else puts("(Half)");
  printf("F3     Toggle Echoplex ");
  if (echoplex) puts("(On)");
  else puts("(Off)");
  puts("F4     Hangup\n");
}

changebaud()
{
  char ln[81];
  int tmp;
  printf("New baud rate:",ln);
  gets(ln);
  tmp=set_baud(atoi(ln));
  printf("Now at %d baud.\n",tmp);
}

main()
{
  long key;
  int ch;
  duplex = echoplex = FALSE;
  puts("\033E");
  set_baud(max_baud);
  termhelp();
  while (1) {
    if (Bconstat(AUX)) {
        ch=Bconin(AUX) & 0x7f;
        Bconout(CON,ch);
        if (echoplex) Bconout(AUX,ch);
    }
    if (Bconstat(CON)) {
        key = Bconin(CON);
        ch = key & 0xff;
        if (key==K_HELP)
        termhelp();
        else if (key==K_UNDO)
        return 1;
        else if (key==K_F1)
        changebaud();
        else if (key==K_F2) {
          if (duplex) {
            duplex = FALSE;
```

```
                puts("\033pFull Duplex\033q\n");
              }
              else {
                duplex = TRUE;
                puts("\033pHalf Duplex\033q\n");
              }
      }
      else if (key==K_F3) {
          if (echoplex) {
            echoplex = FALSE;
            puts("\033pEchoplex OFF\033q");
          }
          else {
           echoplex = TRUE;
           puts("\033pEchoplex ON\033q");
          }
      }
      else if (key==K_F4)
        hangup();
      else if (ch>0) {
        if (duplex) Bconout(CON,ch);
        if (ch == 10) Bconout(AUX,13);
        Bconout(AUX,ch);
      }
    } /* if */
  } /* while */
}

/* defs.h
 * ST Version
 * Created: 02/13/87
* Updated: 12/11/87  */
/* Compiler used  */
 #define MEGAMAX 1
/* Logic values  */
 #define TRUE1
 #define FALSE0

/* Measures of memory  */
 #define BYTE unsigned char
 #define WORD int
 #define LONG long

/* BIOS devices  */
 #define PRT 0
 #define AUX 1
 #define CON 2
 #define MIDI 3
 #define IKBD 4

 #define MAXERR 255

/* Scan code values for various keys  */
 #define K_ESC  0x0001001bL
 #define K_HELP 0x00620000L
 #define K_UNDO 0x00610000L
 #define K_F1   0x003b0000L
 #define K_F2   0x003c0000L
 #define K_F3   0x003d0000L
 #define K_F4   0x003e0000L
 #define K_F5   0x003f0000L
 #define K_F6   0x00400000L
 #define K_F7   0x00410000L
 #define K_F8   0x00420000L
 #define K_F9   0x00430000L
 #define K_F10  0x00440000L

 #define UCR 0x88
```

On the Fritz

Hardware Tricks and Tips from Bob Fritz

Q) I saw your last column in which you mentioned Wico trackballs could be modified to work on the ST. How can this be done?

A) It involves making a small circuit board with an LM339 quad comparator some resistors and changing the wiring. So you see it's not just a wire switch to get it going beside the fact that the Wico trackball has been discontinued. Best to just pick one up for the $30 and if you've got a Wico laying around maybe you can work out a deal with Zebra on a trade in. (If enough interest, and room, I can put the whole How-To article in a future issue.

Q) I purchased an ST way back in May '86. Recently, I bought a newer single-sided drive. On my old drive, I can read all my extended format disks (82 sectors, 10 tracks), but the new drive just won't cut it. Also, some of the software I have (like Brataccas) won't boot from the newer drive. What's the problem, and can it be fixed?

A) That is a problem facing all new ST owners 520/1040STFM/MEGA alike. The problem is Atari switched mechanisms for some reason, probably cost or availability. The newer drives are 80-track drives whereas the older ones could read and write 82. Atari's specs on the drives, both old and new, say they are 80 tracks, 0-79. There is no fix at this time other then to send your software that uses track 82 in it's protection scheme back to the manufacturer stating your problem or to go with a non-Atari drive such as the Indus GTS 100 which can read and write 84 tracks.

Q) I have a 130XE, and I recently was given a 20 meg IBM internal hard drive with IBM controller. Is it possible to hook this up to my Atari? What other hardware do I need, and about how much would it cost?

A) The people to contact are ICD in Rockford, IL. They should be able to set you up with a controller, case, power supply, etc., and the proper adapter for the XE. Another place to try is Supra Corp. in Albany OR. They make a hard drive for the 8bits and may be able to fill your needs. Addresses:

ICD
1220 Rock St.
Rockford,IL 61101
(815)968-2228

SUPRA CORPORATION
1133 Commercial way
Albany,OR 97321
(503)967-9075

Add-on Modem Speaker

By D.F. Neff (MACE, WAUG!)

Introduction

Telecommunication is a frustrating experience for any novice. Unfortunately, it is made even more frustrating by modem manufacturers who elect to reduce costs by eliminating the modem speaker. I, like many novices, began with an Atari 1030 modem (without a speaker) when they went on sale after the release of the XM301.

I spent many late-night hours trying – and failing – to connect with BBSes from a list the modem salesman had given me. After trying everything I could think of, but having little success, I realized the problem may not be me, the modem or the software I was using. The problem had to be on the other end of the phone line.

In a flash of inspiration, I connected a speaker-phone to the modem jack and redialed the modem while listening to the speaker-phone. Almost instantly, a recorded voice told me that the number I had dialed was disconnected! I had wasted hours trying to connect to a BBS that didn't exist. Dialing the rest of the numbers on the list revealed a more horrifying fact. Some of the BBS numbers had been disconnected so long that they were reassigned as peoples' home phone numbers. My late-night BBS calls had been waking up innocent victims who probably thought they were receiving crank calls. Most BBSes have a very short life and as a result, the list I received from the salesman was outdated.

There is a lesson for you to learn from my experience: if you are using a modem without a speaker, *stop* doing it. If you have a speaker-phone, connect it to your modem jack so you can hear the result of your modem call. If you don't have a speaker-phone, build the external modem speaker described in this article. Either way, you'll save yourself some frustration by learning which BBS numbers are valid. At the same time you'll spare some people the anguish of thinking they're the victim of crank calls.

Construction

Figure 1 shows the schematic diagram of the external modem speaker amplifier. Build the circuit on the printed circuit board using Figure 2 as a guide to the pin arrangement of IC1 and its socket. Do not place IC1 in the socket until all soldering has been completed on the entire circuit. The heat of the soldering iron may damage the IC chip.

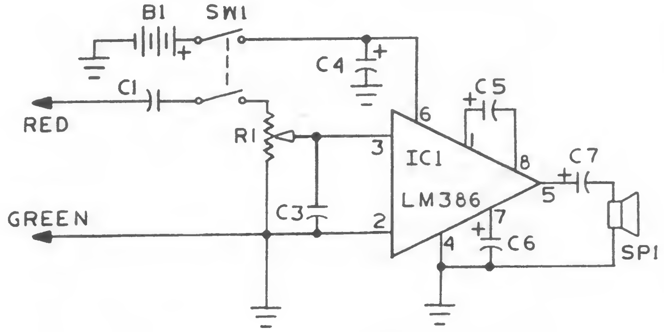


Figure One

Pay close attention to the polarity of capacitors C3, C4, C5, and C6. Some manufacturers mark the negative side of their capacitors, while others mark the positive side. (One of my disk drives came from Atari with half of the filter caps installed backwards because of this.) C1 is a special nonpolarized capacitor required for this type of service. Do not substitute a polarized capacitor for C1.

R1 is a trimpot which provides volume control. You may want to substitute a standard volume control (RS# 271-1721) if you find yourself adjusting the volume frequently.

The speaker indicated in the parts list comes already mounted in an attractive wood case. The circuit board containing the finished amplifier can be mounted on the back of this speaker case with small screws.

Using It

The phone line to your modem contains four wires colored red, black, yellow and green. We will use only two of these: red and green. The red wire connects to one end of C1, and the green wire connects to a ground point in the circuit as shown in Figure 1.

Boot up your modem software and then switch on your new modem speaker. Set the volume control to about 50% volume to begin with. Now have your modem dial your own phone number to get a busy signal on the line. Adjust the volume control to give you a comfortable volume level with the busy signal. Further adjustment of the volume may have to be done during your first few calls to a BBS. You may find that the dialing sound from the modem is too

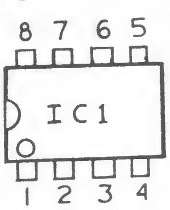


Figure Two

loud for comfort (especially at night when family members are sleeping).

The squealing sounds you hear when a BBS answers are the result of the two computers talking to each other. You can switch the modem speaker off as soon as you hear that sound.

With your add-on modem speaker, you'll always know why you couldn't connect with the BBS you just called. You'll be surprised how many disconnected numbers you've been calling all this time!

PARTS LIST

Item	Description	Radio Shack#
B1	9 Volt Batt.	272-1022
C1	10uF,Nonpolar	272-999
C3	.01 uF Cap	272-1065
C4,C6	10uF Cap	272-1025
C5	100uF Cap	272-1044
C7	220uF Cap	272-1029
IC1	LM386 Amp	276-1731
R1	Trimpot	271-218
SP1	Speaker	40-1250
SW1	DPDT Switch	275-614

MISCELLANEOUS

–	Batt. Clip	270-326
–	Batt. Plug	270-325
–	IC Socket	276-1995
–	PC Board	276-168
–	Wire,screws	

Making Old Software Work with New ROMs

by Michael Schuster (Reprinted from ZMAG #78)

520/1040 ST owners who install the new (4/87) "blit" ROMs in their machines, and buyers of Mega STs may be rudely awakened to the fact that some older software will not run properly. (XL/XE owners please note that strange feeling of deja-vu!)

Copy-protection routines of some games fall apart because of the differences in the way TOS returns CRC errors on disk reads now. I shall not deal with those here. Rather, I wish to share my experiences in trouble-shooting a common, and more easily remedied problem: illegal use of system storage locations.

During the early ST development period Atari released a list of system variables whose locations were to be "cast in stone" – guaranteed not to move in any future version of TOS. These locations range from $400 to $512, and Atari's promise does indeed seem to have been kept. However, as before (this is where the XL parallel comes in) programmers insisted on using unsupported system storage locations (including the range from $840 to $A0FF) to do things more quickly or using more compact code. As warned, however, these have all been moved.

In searching through memory and trying to make some sense out of all this mess, it appeared to me that there is a block of system storage locations $46 bytes long, which have been inserted somewhere between $840 and $93E. (Hmmm...can we say "blitter" boys and girls?) The result is that the original locations of many storage locations past this point have been shifted $46 bytes upwards.

How does this help us? If we can get some idea of what a program is doing when it bombs under the new ROMs, we can look to see if this is occurring because of the use of a storage location that has been moved, and zap the program with a sector editor. Of course, if one has the source code for a program, they can simply edit it and recompile.

Some Examples

The source code for Twister clearly indicates the use of the floppy control blocks to keep track of disk drive status. If you run Twister under the new ROMs, it returns an error as soon as the disk drive tries to step. Aha!! Solution: Search for $0A06 and change to $0A4C; search for $0A0A and change to $0A50. These occur once each in both Twister and the Meg-A-Minute hard disk backup program.

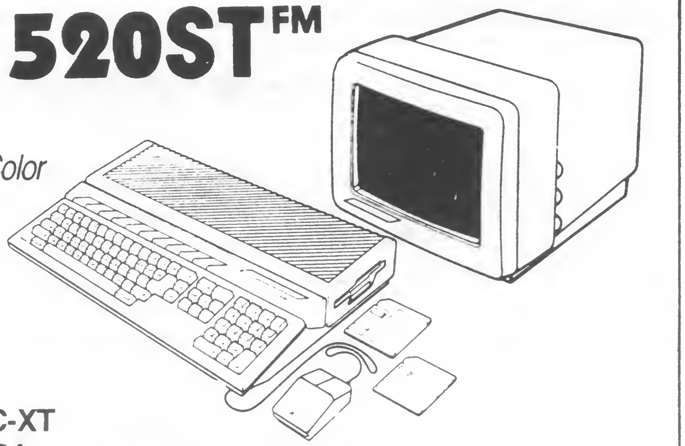
The same applies to those programs which change the drive B step rate for those using external 5.25" drives. See below for details.

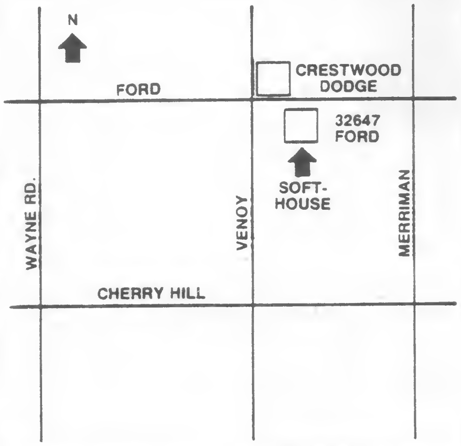
K-Switch, Nite, and older versions of GFA BASIC look at the system location kb_shift to read the control, alternate and shift keys (INSTEAD of using the legal BIOS 11 call). Since these programs all have features activated by combinations of these keys, they will not work as written under the new ROMs. Solution: Search for $E1B and replace with $E61.

Warnings!

Zapping of commercial programs may be a violation of copyright. You must be sure you are within your legal rights to modify any program before attempting to do so.

➡





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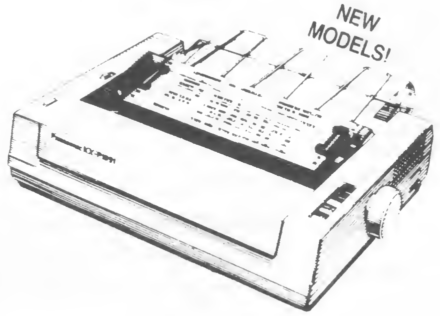
32647 FORD
SOFT-HOUSE
WAYNE RD.
VENOY
MERRIMAN
CHERRY HILL



NEW MODELS!

Programs so zapped *may not run under the old roms*. It only makes sense that if you replace illegal locations with newer illegal locations, the program is now even *more*illegal!

Putting this all to Use

Following is a list of the system storage areas mentioned above. They also happen to be the ones most commonly abused. Then comes MY estimation of where they have been moved to. For those not on the list, within this region, you can simply try adding $46 to the old value. Use this information with care, and *only on a backup copy of your software*. I cannot be responsible for *anything* which results from the use of the information herein.

Be sure that what you are zapping is really a memory location and not data, text, or opcodes which happen to match the byte pattern of the number you are searching for. Often, a memory location will appear in long form when assembled (e.g. 00000XXX) and that can be a clue that it's not text or data. If it doesn't work, make another copy of the original, and look for another zap point. Good luck!

Old Location	New Location	Description
$A06 (word)	$A4C (word)	Floppy #0 Current Track
$A08 (word)	$A4E (word)	Floppy #0 Seek Rate
$A0A (word)	$A50 (word)	Floppy #1 Current Track
$A0C (word)	$A52 (word)	Floppy #1 Seek Rate
$E1B (byte)	$E61 (byte)	Keyboard Shift Status

I am maintaining an ever-increasing list of these. I would appreciate any new date or applications for this type of information. First Prize to the kind soul who can re-write STARTGEM to run under the new OS. I can be reached at: Michael Schuster, Compuserve [70346,17451], GEnie, Delphi, MCI [MSchuster], Usenet [schuster@dasyst.UUCP], The Night Shift BBS (718)816-7792.

Using Alternate Character Sets

by Charlie Henrich

Here is a program for all you BASIC programmers who wish to use alternate character sets in your projects. This can give you the ability to create graphic screens equivalent to Graphics Mode 8 but with more versatility in detecting collisions and such. Lines 190-210 are the heart of the loader where FILE$ is the name of the file with the device number and extender attached. To use the main program, your character sets should use the ".FNT" extender. You can also learn other "tricks" by dissecting this program, e.g. how to add extenders and devices to a file name input by the user and other string manipulations. The "Number of Pages" defines the amount of memory you wish to reserve for storage of your alternate character set data. Remove POKE 712,Q in line 200 if you don't want the border to flash when the character set is being loaded. Have Fun!

```
10 GRAPHICS 0:POKE 710,6:POKE 712,144:POKE 82,0:POKE709,
   12:POKE 752,1:? "<ESC><SHFT-CLEAR>":REM CLEAR
   SCREEN AND SET COLORS
20 DIM LN$(5000)
30 OPEN #1,6,0,"D:*.FNT"
40 INPUT #1,LN$
50 IF ASC(LN$(1,1))>32 THEN ? :GOTO 70
60 ? LN$(1,10)
70 TRAP 80:GOTO 40
80 CLOSE #1
90 DIM D(15),FILE(15):POKE 752,0
100 ? "Name of File ";:INPUT D$:D$(LEN(D$)+1)=".FNT"
110 FILE$="D1:":FILE$(LEN(FILE$)+1)=D$
120 ? :? "Number of Pages ";:INPUT PG
130 X=PEEK(106)-PG
140 POKE 709,6:POKE 752,0:? "<ESC><SHFT-CLEAR>":REM
    CLEAR SCREEN
150 ? "Type: POKE 756,";PEEK(756):? "To Use ROM-Set"
160 ? :? "Type: POKE 756,";X:? "To Use New Set"
170 REM  **** LOADER ****
180 CHBAS=X*256
190 OPEN #1,4,0,FILE$:FOR X=0 TO 1023
200 GET #1,Q:POKE CHBAS+X,Q:POKE 712,Q:NEXT X
210 ? :? :POKE 752,0:POKE 709,12:POKE 712,144
```

Software Piracy - My Thoughts

Author Unknown

I've just made a decision. I'm going to stop pirating software. Some of you are probably thinking, "Wow, you mean he steals programs?" and the others (the majority, I believe) are thinking, "Man, why the heck you gonna stop piratin'?" Well, I think I can answer you both.

The turning point was a conversation I had with a local SysOp. He told me the reason why so many software companies are not producing programs for Atari anymore is because it's becoming unprofitable! So many people are simply stealing these programs via bulletin boards or trading with friends, that these companies are not making money any more. He told me the author of a word processing program, Paperclip, had the exact same royalty contract for the Commodore 64 and the Atari version. The author,

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allegedly, made a LOT of money even last year (something like $1800) on C-64 sales, but made something like $89 in royalty from his Atari sales! And now, quite obviously, he probably won't be making much else for the Atari.

And do you know what the topper is? I'm using a pirated version of Paperclip, right now, to write this!

Do you know the reasoning most software pirates use to condone their acts? "Man, they charge so much for software these days! Then, when you've spent all that money, you find that the program stinks! You've wasted $20-50 on a horrible game!" That is reasonable logic, in a way. We've all been burned by software. I bought Canyon Climber, when I first got my computer. I thought it would be like the arcade game Crazy Climber. It wasn't. I bought Astro Chase, and didn't like it. There have been others.

It was about then when I started accepting commercial software without paying. My friend had an 800, and he would copy a few of the games he had for my cassette drive, and I'd let him at my stuff.

Next came my first glance at the sleaziest pirate I have ever met. I answered an ad in the Wheeler Dealer, for a few cartridges he had for sale. When I got there, he opened a briefcase and showed me about every game that was on the market at the time. "For $5," he said, "I'll let you have anything. If you bought it new, it'd cost you much more!" So I did it. It was a great deal, I thought. Getting the best games for a fraction of the cost. Now, upon reflecting this, I am sorry I ever did it. Not only was he pirating, but he was profiting from others' hard work! That's like taking a book, rewriting it, then selling it for less. All the others I've dealt with have been friends (mostly acquaintances) that I've met in various places.

I'll admit that, up until recently, I never really thought about it as being wrong. I mean, I knew I was taking programs without justly compensating the author, but I could always use that basic 'pirate' logic to make myself believe that what I was doing was all right. Lets face it, I never *would* have bought most of the things I have now. Pirating did help me to see what programs I like and don't like. But I can't possibly use that as a valid excuse, since I have *never* bought a program after seeing if I liked the pirated version.

Take Paperclip, for instance. This is a marvelous word processor! I use it exclusively. I *should* go out and purchase a legitimate copy. But, not only do I have the program, but the person who gave me the copy also xeroxed the entire manual for me! So, I suddenly have no reason to go out and buy it. I've never felt guilty about it, but I think I oughta start.

If you pirate now, just read the rest of this. I'm no narc, and I'm not about to hate all my pirating friends for cheating authors out of making a living, but I'm not going to take any more illegally copied software.

Think about it. Everybody is trying to make a living. We all need money to survive in this world, and software programmers are no different. You wouldn't want someone to take something that *you* spent many, many hours, up late at night, trying to perfect, would you? After slaving over anything for that long, to have someone break into your lab and steal it would just crush you, right? Well, it *is* the same thing!

You can think, "Someone will buy it, so I don't have to!" or, "They get a salary, so they don't have any problems!" but you really don't know that. It's like a lot of things. You can toss a beer can out your speeding car, and feel OK by using the logic, "Well, since other people don't litter, mine won't affect anything." But if everybody thought that, this world would be a dump. We all should *be* that 'other' consciencious person, because we simply don't know if anyone else will.

I know what I'm saying here may not change much. But it is now something I feel strongly about. Stealing is wrong, regardless. If you believe in God, then think, "Does stealing bother Him?" Isn't, "Thou shalt not steal" a commandment? It's also illegal. Finally, always keep in mind if more people continue to pirate, more and more software dealers will just give up selling altogether. Tell me, what good is a computer without software?

Flying The ST

by Allen P. Bargen (c)

commentary on the world of Atari St computers

Calisthenics for the mind...., or resolutions you really never intended to keep.

...*Write an article for the journal*, what a nifty idea ! With the proliferation of Utilities, Games, Word Processors, and the ilk, there must be a growing number of you that can offer articles for publication. All of us have a deep and growing interest in the ST, why not share your knowledge with us, and help us learn in the process. Writing is a rich and rewarding experience that you just may find you will enjoy.

Most people I speak to tell me that they are unable to put their ideas into words, yet they are able to speak for endless hours on the same topic. Let's face it, the real difference is the effort required to put those same words on paper. Not such a difficult assignment, so let's see some input from *you !*

Publishing Partner...

Softlogic, producers of "Publishing Partner" has released another update (version 1.03) of their very popular program for the ST. This release was to have corrected all of the bugs in the previous version, but not all of the little critters were caught.. Here is a partial list of some that were corrected.

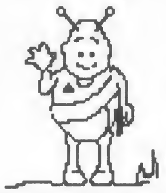
You may now load any number of fonts into your font selector box without affecting your screen font display.

Previous versions would crash if you attempted to enter a NUL character into your document without creating a column. This problem is now resolved.

It is now possible to access a desk accessory like the control panel while using Publishing Partner. Had you tried this on the earlier versions, you could not close the window, once opened.

The Helvetica font is now the standard default font loaded at boot up in the program. If you do not have a config.inf file on your disk, this is immensely helpful. Prior to this change, only the SYSTEM fonts (2) would be loaded.

Now, when you copy text to the buffer that has Tab stops imbedded in it, the tabs are copied with the Text when you use the paste otion. This was a very important correction, since much time could be lost repairing text that did not cut and paste properly.



There are however, more than a few bugs left to squash, to make Publishing Partner the great program that is can be. With their concentration currently on the new version, soon to be released, under the name *"Publishing Partner Professional"* presumably, they will correct many of the bugs in this latest release, by default. One can only hope so.

The professional version is scheduled for release some time in the first quarter of 1988. Here are some of the major features it will offer...

- Auto Text overflow around any graphics object. (yippee)
- Auto hyphenation
- Auto kerning
- Grouping of objects
- Recorder pages
- Use of Degas compressed pics
- Use of Easy Draw and IMG pics
- Ability to import text files from Word Perfect, 1st Word, and Word Writer.
- View up to 6 documents at a time
- Enhanced Disk Utilities
- Undo command
- Recall text
- Search and Replace
- Variable grid with snap
- Insert/Delete multiple pages
- Zoom command

These are the major changes. The new release will be the closest thing to real Desktop Publishing yet. Coming to a printer near you soon.

LOOK

Atari Corp. has released information on some of the latest products supposedly on their way to market. They win the "vaporware" award of 1987 for some of the products announced, but never delivered. Here are some of their latest...

- The new Abaq "Transputer". Running on an INMOS T-800, 32 bit RISC (reduced instruction set) processor, the Abaq uses the ST for a terminal. The system now in the works uses 4 mbytes of memory plus an additional mbyte for the display. It may be expanded by adding up to three cards, each of which can host 4 more T-800 processors. Each T-800 can perform 1200 MIPS (Million Instructions per Second). They may be daisy chained to share complex tasks. Screen modes will be 1280 x 960 with 16 colour, or 512x480 in 16 million colours. The entire system will operate under HELIOS, a UNIX clone now in development. I reserve final comment on this one..... just too much to swallow at once.

May the force be with you....

Is ANALOG Magazine Doomed?

Open Letter to Mr. Des Chenes

by Don Neff

The big question for 1988 is: will Analog magazine survive? Some user group newsletters are saying Analog has already gone out of business. I can understand how they came to that conclusion; some Analog subscribers around here (Mich, Ohio, Ind., Ill.) haven't received an issue since late 1986 or early 1987.

As president of the Michigan Atari Computer Enthusiasts, I receive many comments and questions about our members' unfilled Analog subscriptions. Perhaps the members feel I can use my position to get Analog to address their concerns. Unfortunately, I'm one of the many who may have wasted their money by sending it to Analog. Analog hasn't responded to my calls or letters either.

Subscribers who called the subscription problem hot-line (1-800-345-8112) were told: "The (pick any month) issue is late because of problems with our printer. Your copy will be mailed next week." Of course, our copy never seems to get mailed. Letters of inquiry to Mr. Pappas, Mr. Des Chenes, et al, are never answered. Magazine vendors couldn't help us since they weren't receiving their store copies either.

I know Analog is still in business because they just sent me two renewal notices for my disk/magazine subscription. That's right, for $105 I can be treated to another year of Analog vaporware and neglect, just like 1987!

The Atari community needs Analog but, we can survive without it if necessary. Analog, on the other hand, can't survive without the Atari community. They know they need us; that's why they send subscription renewal notices. With that thought in mind, Mr. Des Chenes and his crew should stop hiding from us and address our concerns if they expect us to subscribe again.

Analog has always been one of my favorite computer magazines, and I will miss it if it dies. I like the cover art, I like the articles, I like the programs (even though there are too many games). I like Analog period. I don't want to see it die. It will die though, if enough unhappy subscribers decide not to renew their subscriptions.

That's why, Mr. Des Chenes, I am sending you a copy of this magazine, containing this article, along with a self-addressed, stamped envelope, so you may respond to the questions of your subscribers who haven't received their money's worth from you. Our questions are:

1. Is Analog going out of business?
2. Why didn't you send our magazines in 1987?
3. Why didn't you let us know what was happening with our subscriptions?
4. If you stay in business, how will you compensate us for our unfilled 1987 subscriptions?
5. Why should we take a chance on you and renew our Analog subscriptions in 1988?

If you respond to these concerns, we'll print your unedited reply in the next issue of this magazine (which is circulated to user groups nationwide). You obviously can't respond to your subscribers in your own magazine because you're not sending it to us for some reason. Let Michigan Atari Magazine be your vehicle for getting your response to the user groups and ultimately, to their members who are your subscribers.

In the mean time, I recommend that all Atari users refuse to subscribe to Analog magazine until you explain why you treat your subscribers so poorly. If you and Analog are having problems, then be honest enough to tell us. You may find that you've spent the last year hiding from friends who want your business to succeed just as much as you do!

Living with the XEP80

A Subjective Review by Wally Wong, Reprint from Dec. '87 Puget Sound Atari News.

Yes, folks, it's finally here, the long-awaited 80-column adaptor from Atari, the XEP80. Actually, it's more than an 80-column display module, it's also a parallel printer interface. There are some delights and some plights you should be aware of, as well as a plethora of potential programming hacking that could keep some Atari enthusiast awake many a night.

The Atari XEP80 Interface Module is an 80-column video display controller and "standard" parallel printer interface for all 8bit computers with a minimum of 16K RAM. The XEP80 looks just like the Atari SX212 modem – same size, dimension and color -- minus the lights on the front panel. The XEP80 comes with just about everything you need: video cable to connect the module to a composite monitor (monochrome recommended), power supply adaptor (Egads! Another one; that makes six tucked under my desk!), the module, a 20-page owner's manual, a warranty card (that no one I know sends in) and a 5.25" distribution card, all for $79.99 list.

A nice, long cable runs out the rear of the module that connects to your computer via joystick port one or two. Most will probably elect to use port two and keep the other available for a joystick. No problem, except one of the demo programs (WINDOW.BAS) will only work if the joystick is in port two and the module plugged into one.

The power switch is located in the rear and a tiny diagonal window emits a subtle green light on the front panel when the power is on. The video cable is a simple cable with RCA male jack on both ends. One end connects to the rear of the module, and the other to your composite monitor (sorry, no TVs allowed).

The parallel printer port is a standard DB25 parallel female connector like those found on the STs and IBM-type systems; not an Atari 850 or P:R: Connection connector. The reason for using DB25 connection is for "standardization" which means you can obtain a printer cable from just about any computer store (but we will make our purchases at our local Atari vendors, right!!), and not be handcuffed to "Atari Only" vendors who would be the only ones carrying 850/PRC parallel cables. If you wish to use only the parallel printer port, hold down the shift key while booting the disk and continue to hold until it's done loading. This will allow output to the printer, maintaining the normal 40 columns through the computer video port or RF. Here is what the owner's manual says about selection the printer port:

> When you start up your system with the XEP80 Module, the module is prepared to direct output to a printer throught the parallel port (P1:). Specifiying P2: directs output to the Atari 850 Interface Module; P3: outputs to the 1025 printer; P4: to the 1020 Color Plotter; P5: to the 1027 Printer; P6: to the 1029 Printer; P7: to the XMM801 Printer; and P8: to the XDM121 Printer.

There is a PRINTER.BAS program on the distribution disk. This allows you to make adjustments to the printer interface configuration, i.e. light or heavy translation and device unit; P1:, P2:, etc. The XEP80 also sports an internal 2K buffer for printing. Nice touch. (Don't throw away your old printer interface just yet; I'll tell you why in a bit.)

Turn on the XEP80, monitor, disk drive(s). Insert the XEP80 disk (of course you made a copy of the original, right?), and turn on the computer. The XEP80 handler comes as an AUTORUN.SYS file so it will boot up automatically. If your monitor is adjusted to give you a full screen with a normal 40 column screen (like mine), the first thing you will notice is the bottom half of the last three characters of the READY prompt of BASIC in the upper left-hand corner of the screen. If you type DOS to get to the DOS menu (DOS 2.5 is included on the disk), the first line of the heading is tucked somewhere beneath the top of your monitor chassis.

The next thing you will notice is the bunch of tiny characters (relative to 40-column characters) on the screen! Folks, you now have an 80-column display. The characters are quite readable on the BMC, Technika and Commodore 1702 color composite monitors. The display looks GREAT on a monochrome composite monitor (once I got mine to work properly).

The characters are defined within a 7x10 cell (7wide x 10high) compared to 8x8 cell used normally. I think this is the reason for the truncated display at the top of the screen; the characters are taller than normal and pushing the top of the display. Now, this is just a guess; I'm not a video display wiz. This can be corrected by adjusting the vertical width.

Correcting for 80 columns will create a smaller vertical screen when you return to 40 columns. This is okay if the vertical adjustment is located on the front of the monitor or easily accessible. If not, you'll have to decide if you want to make this adjustment and then find someone qualified to do it.

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The XEP80 can actually display up to 256 character columns, but only 80 are available at a time (hmmm, doesn't AtariWriter Plus scroll in 256 columns??!!). The demo program WINDOW.BAS and a joystick illustrates this aspect nicely. Remember, the module has to be plugged into port one and the joystick in two for the program to work. If you want to disable the XEP80 but want to use the printer port, hold down the shift key when booting the system. This disables the 80 column and enables the normal video output; composite video port or RF. The XEP80 handler disables the ANTIC chip from displaying and display I/O is directed to the XEP80. There is a document file on the distribution disk that explains all this in detail.

The distribution disk comes with DOS 2.5, the XEP80 driver, assorted demo programs written in BASIC, a utility program in BASIC that allows you to recreate the AUTORUN.SYS file to reside at a different location in memory, assembly language source code, and a doc file that goes into the hardware and software specifics in detail.

[Editors' Note: Because of a large amount of submissions this month (YEA!) we had to divide this article into two parts. Next month, we will continue this list of pluses and minuses of the XEP80.]

ST Notes

by LeRoy Valley (TAG)

So, you purchased Publishing Partner three months ago and you've done everything imaginable with System, System Bold and Helvetica. The next step was to download some of the public domain fonts on the local BBSes to spice up your documents. Only... wouldn't it be nice if the tail on the Roman y curled just a little more... or the l didn't look so much like the 1... or if that one improperly designed character looked as good as all the rest when you print it out?

Font Design Partner (Font Partner), by Interactive Microsystems, allows you to handle any of the situations listed above with ease. Using Font Design Partner you can modify existing fonts or even create your own fonts from scratch! The program automatically creates both printer and screen fonts, and even allows you to create the screen fonts for both monochrome and color systems! If you'd like to know more about this indispensable tool for Publishing Partner, then read on...

Opening up the manual (What! Read the manual first, you say?), the first thing we come across is a chapter on "The (Very) Basics of Typesetting". This chapter explains terms normally used in typesetting when describing fonts. Terms like "em square", "x-height", and "baseline" are defined and accompanying illustrations show the user how the term is used for a normal font. These terms are then applied to Publishing Partner's method of defining a character. This type of background information is invaluable when you start designing your own font. The next thing we find is a tutorial on using the printer font editor and this is where we finally fire up the program! The program is not copy protected, so you can make a backup – *for your own use!* Font Design Partner can be placed in a folder on your hard drive and will work fine.

After moving Font Design Partner over to my hard drive, I double-clicked on FONTPART.PRG and the initial screen flashed up. This is where you discover that Font Design Partner is GEM based...well, sort of. That is, the mouse is fully supported, but you don't get drop down menus, dialog boxes and all the other neat GEM goodies that you are used to. Instead, Interactive Microsystems has chosen to design their own input system and it works very well once you get used to it. The menu is constantly displayed on the right hand side of the screen. To select an option, simply point at it and click, like you normally would, or use the function key that appears next to it.

The biggest problem that I had occurred when performing operations that normally require a double-click (like file selection operations). There is no such thing as a double-click in Font Design Partner. The left mouse button selects the option and the right mouse button confirms it. After 10 minutes of playing, this method becomes very natural and actually can save you from accidentally destroying your work!

Immediately below the menu the current font and character being worked on is displayed, and at the bottom of the screen is the mode indicator (Norm or Full – more on this later) and the cursor coordinates for the drawing window. The left 2/3 of the screen are occupied by the drawing window (the area where all of the editing is done). Point grids are displayed along the top and right sides of the window to aid you in sizing and placement of the character.

Now that you've got an idea of the screen layout, lets get rid of that blank drawing window by loading in an existing font. Selecting the "File Manager" option brings up a new menu that gives us all of the standard file operations, (load, save, rename, delete, create a folder – even format a disk and display free drive space!) and all from *within* the program. The file manager automatically looks for printer font files (.PFT) if you're in the printer font editor and (of course) screen font files (.FNT) if you're in the screen font editor. To load in one of the fonts displayed on the screen, simply point and click. If you need to change the current directory, just click on the path name at the bottom of the screen and edit it. When you finish with the File Manager, click on Return to go back to the editor.

Returning to the printer font editor, the character M will be displayed in the drawing window. To select any other character, just press the desired key, and the current character defined for that key will be displayed in the window.

Now that we've got a character, we can start to have some fun! Each character is defined by a list of objects. Font Design Partner gives us four types of objects to use when creating characters. These objects include the Goto, Line, Curve, and Close Path. The Goto is a single point object that is always the first object of any character. You could say that it is the starting point of the character. The Goto is also used when jumping to another set of continuous lines, such as when going from the outside of an O to the inside. The Line object simply creates a line between any two points. The Curve object allows you to create very smooth curves. It creates a line between two points, but the line also has two "bender" icons associated with it. By clicking on a bender icon and dragging it, the line can be curved to *any* position imaginable! This feature is fantastic for creating S-shaped curves from one object! The last object, Close Path, is used to seal the path between the final object and the last Goto. If the path is not sealed properly, Publishing Partner might have a problem when printing.

A closer look at the drawing window reveals that there are three dashed lines running through the window. These are called system hash marks. Two of them, the baseline and the x-height, run horizontally and affect every character in the font. The third one runs vertically and sets the width of the current letter. System hash marks are displayed as heavy dashed lines. Font Design Partner gives the user 12 definable hash marks (in addition to the 3 system marks). By clicking on the point ruler you can add up to 6 horizontal and 6 vertical hash marks. These are great for setting predetermined widths and points. You can easily insure that all facets of a

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character are the correct width! The only problem is that I can't save the hash marks. (I just talked to Jeff Crow, the President of Interactive Microsystems, and he said that he might add this feature!) When you've got 10 or 12 marks set and have to leave your computer, it's a little bit of a chore to set them again.

Font Design Partner displays the currently selected line or curve object by drawing a small box around each end. A heavy walled box indicates the start of the line, and a thin walled box indicates the end. To select a different object, just click on Previous Object, or Next Object. When an object is selected, you can modify it by clicking on the desired icon and dragging it to the desired position. Modifying characters has never been easier! Font Design Partner also allows you to insert and delete objects anywhere in the path of the character!

Once you have completed the outline of your new character you will want to use the Set Fill Points option, which allows you set up to 10 fill points per character to insure that Publishing Partner prints your character properly. If you inadvertently place a fill point, just use the Delete Fills option!

Publishing Partner printer fonts actually consist of two fonts, a thick font and a thin font. The thin font is used when printing characters under 10 to 12 points. Both fonts must exist in the font file to make the font usable. The options Edit Thick and Edit Thin allow you to edit either font. If you create your thick font first (and I highly recommend that you do), you can use the Copy Thick command and copy the finished thick character into the thin one! This saves a lot of time, and let's you test the thick font before actually designing the thin one. You can even tell Publishing Partner when to use thick or thin fonts by using the Set Cutoffs option! Clicking on Set Cutoffs will display two numbers. The top number is the lowest point size that will use the thick font, and the bottom number is the smallest point size that bold thin font characters will still be allowed to use the thin font. Once over this setting, the Publishing Partner will use the thick font for this character.

If you've finished creating your M and want to use most of the same objects for your N, just use the Copy From or Copy To options. By selecting Copy From and typing a key, the selected character will be copied to the current character. Copy To simply copies the current character to any other character.
Oh Oh...I really screwed up this character, what now? Selecting Abort Edit will restore the character to it's original form (as long as you haven't saved the font yet). This has saved me more than once!

Now, since I promised to talk about Norm and Full mode, here's the scoop. Publishing Partner expects its basic fonts to be 12 points in size. All scaling is done based on this assumption. In Norm mode, Font Design Partner displays the character in a blown up 12 point by 12 point screen. If you create the character the height of the drawing window, it should be just right. Well, what happens if you need to place benders outside of this window, or if you need to place special symbols (like accent marks for foreign characters) over top of a capitol letter? Selecting Full mode shrinks the window and displays a 26 point by 26 point square, allowing you to accommodate these special cases. While in Full mode, the normal 12 point square is shown with four corner tick marks. Anything drawn outside of the Full mode square *will* be clipped by Publishing Partner!

Immediately below the Norm and Full indicators, there are cursor coordinates which are constantly displayed while moving the mouse in the drawing window. You'll find out how necessary these are when you try to accurately place corners and benders!

Now that we've created our printer font, let's create a matching screen font! Selecting Screen Font (surprise!) places us in the screen font editor. Before creating our font we need to tell Font Design Partner whether we want to create the monochrome or color font. We do this by clicking on the appropriate item at the bottom of the screen. Selecting File Manager allows us to load in an existing font for modification. But what if this font is very different from anything that we already have? Selecting the Auto Font option with the left button will automatically create the current character for you, the right button does the entire font! It won't be perfect, but it does give you a good head start.

As you work on a magnified version of the letter, the actual letter is displayed at the bottom of the edit window. This makes it very easy to see any changes immediately! The screen editor menu includes options for Copy From and Copy To, just like in the printer editor.

When you load a font into Publishing Partner, the font name is displayed in the font selector box. To designate what that name will be, click on the Font: option and type in the new name! Once you've created the color font and saved it, click on the MONO indicator and the font will be converted! Now save the font again, and you can upload your latest masterpiece to your local BBS with both Mono and Color fonts!

Just to prove that I've actually read the manual AND even used all of the options discussed in this review, I've included a sample of a font that I'm working on. It's called Bamboo, and will be coming to a BBS near you soon!

BAMBOO

Overall, this program (and it's documentation) gets a solid A+. I have yet to find any bugs in it, and it does it's job *very* well. At the ridiculously low price of $24.95 (and that's list!) it's a steal! Interactive Microsystems has been very helpful when I've called them.

Minor revisions are provided for the mere cost of postage, and major upgrades will be available at the cost of the value of the enhancements. There is a version in the works for Publishing Partner 2.0 and it will convert old fonts for compatibility with the new version.

Well, that wraps up my review for this month. Font Design Partner v1.1 Interactive Microsystems P.O. Box 1188 Canyon Country, CALIFORNIA 91351 (805)298-7357.

Last Hacks: ST Emulator for 8bit?

By D.F. Neff (MACE)

Last year the Atari community waited while Atari Corporation fought to prevent the release of the 8bit emulator for the ST. This show of resistance may have been just a smokescreen to hide a secret research project from the user groups! If we look back at what was occurring, and read between the lines, all the evidence points to the same conclusion: Atari is developing an ST emulator for the 8-Bit line!

The Clues

First, Atari began selling stock to the public. Jack Tramiel said he was doing this to get money to pay some bills. Now, Jack has lots more money than you or I have and we don't need to sell stock to pay our bills. But, Jack is a nice guy so we didn't ask what he really planned to do with the money.

Second, Atari repeatedly says that they are going to continue to support the 8-Bit machines. I've never heard them say they're going to support the 16-Bit machines though! That sure looks ominous for the 16-bit future.

Third, after a weak fight to prevent the release of the 8-bit emulator, Atari allowed it to be released to a disappointed public. The emulator was a mere shadow of its prerelease image.

Was Atari's resistance to the emulator's release just a smokescreen to divert attention from the expensive research being done on the ST-emulator?

The Motive

When Jack Tramiel bought Atari from Warner, he received thousands of brand new 8-Bit machines, already built, just sitting in warehouses. Now, consider that when Atari sells you an ST, they have to build it, and that cost lots of money. But, if they had an ST emulator on disk, they could just give you an 8-bit machine, with the emulator disk, for the price of an ST. Since they already have the machine, the only cost to Atari is the $0.23 for the disk! The term "Gross Profit" takes on a whole new meaning in this scenario.

Proof

When the 8-bit emulator was demonstrated, Atari quickly pointed out that the 8-bit software was running half-speed, at best, in emulation mode on the ST. It was another smokescreen to prevent us from realizing the obvious: the ST can run only half as fast as an 8-bit!

It's logical that any 16-bit machine will run more slowly than an 8-bit machine. Let me use an analogy of human speech to demonstrate that. If I start throwing 16-letter words at you, our conversation will proceed very slowly while you try to figure out what I'm saying. In fact, you'd probably have to keep referring to a dictionary to figure out the 16-letter words I'm using. Big words just slow things down.

However, if I talk to you in 8-letter words our conversation will take place much faster and end more quickly. Likewise, if I talked to you in 4-letter words, you'd end our conversation very quickly. It's no wonder that 8-bit machines can run faster than a 16-bit ST.

At this point ST owners are probably thinking that the ST files are too long to fit into the normal 8-bit memory. Well, most of room used by an ST file is for the Dictionary. That's right, the ST doesn't understand those 16-bit words and has to look them up in the dictionary. Once you've stripped the dictionary from an ST file, it'll probably fit in an unmodified 400!

A public domain vaporware program called TICA

(Tongue In Cheek Algorithm) translates each 16-bit word into two 8-bit words. All timing loops are lengthened, during the conversion by TICA, since the ST program will be running twice as fast on the 8-bit machine.

ST graphics conversions are a problem. Users of the 8bit machines can choose from a field of graphics screens which range from Graphics 0 to Graphics 32. ST users can choose only High, Medium, or Low (like a cheap clothes dryer). TICA changes all ST graphics to 8bit Graphics 0 so you can see the individual pixels. That eliminates one of the most annoying shortcomings of ST graphics -- all the pictures look like photographs. Who's going to believe you created that picture on your computer if they can't see the pixels?

Conclusion

It all adds up to the same thing -- Atari is coming out with an ST emulator for the 8-bit and stop production of the ST line. Still have doubts? Consider this then: why does Antic, the magazine respected and loved by user groups and SysOps nationwide, publish their ST programs on an 8bit disk?

BITS AND PIECES
FROM THE
Battle Creek Atari User Group

Next Meeting Jan.14, Voc.Ed.Ctr., 475 E.Roosevelt

Chairman's Column
by Chuck Steele

Last month's Christmas party was held at Josephine Yeager's home. We were able to enjoy her ST and XL set up and running. We called everyone (I hope) to let you know of the location change. I hope we didn't miss anyone with our phone calling. Thanks to Jo for letting us use her home. It was fun seeing the ST version of Wheel of Fortune and making mental comparison to the 8bit version which was last month's DOM. We had a nice disk of games that Tom compiled for us. Thanks Tom.

We really like the new magazine format. It looks great and is easier to read with the larger type. Keep up the good work Bill & Pattie Rayl. We look forward to more interesting articles.

Golly, another Christmas has come and gone, and we are into a new year so HAPPY NEW YEAR fellow ATARIANS. If you have been reading your MAM's closely in the past six month's or so, you may have noticed some writers such as Leo Sell, John Nagy, Jim Steele and others calling for others to pitch in and get involved in *your club.* Club meetings need input and participation from many people. The idea behind all the clubs is that we learn and share with each other. If you just sit at a meeting and don't ask any questions or make any comments then you haven't gained anything and neither has the club. Even worse, if you don't come to meetings, then you can't see the new demos or ask any questions.

In addition, we need new officers to kick off the new year. All positions are open. Chairman, Secretary, Librarian, Treasurer. I hope you will all come to the meetings and be prepared to contribute some of your time.

Do you like your 8bit Atari computer but feel that you aren't getting all the programs and support you would like? Unfortunately Atari has more or less dismissed the 800 XL/XE machines as game machines, with little new software being issued. So where does one go for help? Your local user group can be a big help! Many groups have large libraries of public domain software, and members who are experienced and knowledgeable about hardware and software problems. The local user group is your link to the rest of the Atarians out there who can assist you or you can assist them.

If we stay together as a group then we will have a stronger voice in demanding more support for our machines. If this network of Users disappears, then the life-support system for your computer will be unplugged! It will be up to you alone to keep it running. So I make one final plea for you to come to the meeting and support BCAUG this year.

If you are elected as Chairman, do all you can to see that things are lined up for meetings: that we have a meeting place and time, and that we have an agenda which covers NEWS, OLD Business, NEW Business and DEMOs.

If you are elected as Librarian, then see to it that the Library is kept up. Have the Library at meetings, write articles for the newsletter so people know which new programs have been added to the library. Update the Library by trading with other clubs.

If you are elected as Treasurer, then see that all records are keep up to date and that you know which members have paided up and which have not. Notify members at time of renewal. Give reports at the meetings.

If you are elected as Secretary, then take notes during meetings. Type these notes into meeting minutes and upload to MAM, so they can be published. Be prepared to read notes at meetings if any questions should arise.

I hope you will all be able to make the meeting and be prepared to join in running *your* club. Each of the above jobs shouldn't take more than a few hours each month, but if one person ends up doing several jobs then it takes much much longer!!

CAPITOL HILL
ATARI OWNERS SOCIETY

SERVING THE LANSING AREA ATARI

C.H.A.O.S. is the CAPITOL HILL ATARI OWNER'S SOCIETY, serving the ATARI community of the Lansing, Michigan area. The CAMPUS HILL ATARI OWNER'S SOCIETY is the Michigan State University chapter of C.H.A.O.S.

Membership dues are $12.00 per year and entitle the member to a 1 year subscription to the Michigan Atari Magazine, a free disk from our regular library, access to our other libraries and facilities, as well as access to our other resources. Dues may be paid at any C.H.A.O.S. meeting or by mail. If not using an official Membership Application, please include your Name, Address, Phone and a list of your equipment and interests. Inquiries regarding C.H.A.O.S., mail orders, memberships and etc, should be sent to: C.H.A.O.S., P.O. Box 16132, Lansing, MI 48901

General meetings of the membership take place several times a year. 8-bit and 16-bit Special Interest Group meetings take place monthly. S.T.IN.G. (S.T. INterest Group), for Atari ST owners, meets on the SECOND Saturday of the month. The 8-bit SIG Atari, for 400/800, and XL/XE owners, takes place on the THIRD Saturday of the month. The meetings take place at the MSU Physics-Astronomy Building, Physics Road, Room 118. Meetings begin at 10:00 am sharp and last until 1:00 pm. Members and guests are welcome to any SIG meeting that interests them. To get to a meeting, take East Grand River to the Collingwood Entrance for MSU. The first available left turn is Physics Rd. The Physics-Astronomy Building is about 1 block from the corner, on the right hand side. Park in the gated lot just past the building.

Illegal copying, or any violation of copyright laws, is not condoned or allowed at any C.H.A.O.S. sponsored function, including the club BBS.

Presidential Address

by Leo Sell

Happy New Year!! Hope you had a Merry, Atari Christmas. New Year's is often a time to look at the past and plan for the future. In the past CHAOS has been very strong and active in Atari computer matters, both locally and nationally. But, as I look ahead, I fear that we have weakened considerably and prospects for the future are grim. Much of my pessimism comes from financial worries. Our treasury is down to a dangerously low state. Attendance at 8-bit meetings continues to disappoint. Library sales are slow. In some ways we are dealing with a saturated market, but there are other reasons too.

We still need people to get involved and thereby help promote the club. We remain in need of a Publicity Coordinator and of an 8-bit Disk Librarian. Both jobs are vital to prevent the eventual failure of the club. We also need support from the membership at large, with renewals, donations and purchase of library disks. Remember, you can buy them mail order or rent the library for a very reasonable fee.

There is one other reason for the decline we are experiencing. There is a general lethargy in most Atari User groups now. It is a result of willful negligence on Atari's part to its best market and promoters. Atari is now known for broken promises and phantom expectations. The dealer network they purport to be putting together seems to be nowhere but on the West Coast. And, one week before Christmas, their products are still not advertised much on television in this area. All of this is proof that we have to pull together and take care of ourselves. If you want the most from your Atari, jump in and help. Like many things, the best way to get something out of Atari computing is to put something in it.

Just a quick reminder that the annual club dues will increase in January from the current $12 to $15. Renew by the Jan. meetings and avoid the New Year rush and save money at the same time. What a deal! Remember, you still get the free library disk that goes with the renewal or new membership.

The January 8-Bit Sig will include a discussion/ tutorial session on DOS for the beginner and the expert. Come and learn what Atari never told you... This begins a series of Instructional sessions for all members on a variety of subjects.

ST Library News

by Sally Nagy

Are you ready for a new year to use your ST? New files are coming in all the time and needless to say I am busy organizing them. I am hoping to have a *new updated* catalog with all disks since July so you don't have to keep all those supplement sheets.

For those of you that missed our Christmas Meeting, there was a *new* Audiolite Christmas Disk with pictures and songs. This disk is available as Music #8. Music #9 has LCD or WOW music and color display.

You can choose from eight different songs to play. More Spectra pics on Graphic Display #14 with characters from "Startrek: The Next Generation," Picard, Lt. Data, Worf and Yar ... And another with general pictures. Other Graphic Display disks will have demos of Blacklash, Extensor, Goldrunner, and more! For *1Meg only* users – Juggler, Globe, Dolls and Christmas Demo with more to come...

New Games such as Mine Sweeper, Brickyard, Sensori, and Galactic Ranger. A new *monochrome* disk with Awari, Jeopardy and Elimation and Demos Swan and Juggler... Version 2 of the Eamon Adventures replaces Adventure A1. A new disk with helps and solutions to some of the commercial games. New educational disks for preschool to age 10, Music and drawing programs. Mr. Potato Head, Kid Puzzles, Kid Mixup and more.

Come to the January ST meeting and see 3D. John Johnson promises to bring his Stereo Tek glasses and some new software to use with them. We can even view Spectra Pictures in 3D. See you there.

The CHAOS Download

by John Nagy, SYSOP (517) 371-1106

CHAOS BBS Statistics

We have been operating since June '85 at our current phone number, and have logged 30,000 (yes!) calls since March '85, when we began using what has become the M-5 System BBS software. That averages over 30 calls *every day*, about one every 45 minutes, night and day *for nearly three years*. And you wonder why you occasionally got a busy signal! Seems the phone company should pay *us!* We have about 400 regular users in 35 states and 6 countries.

We offer 300/1200 baud, and about half of our calls are at 1200 baud. We have had a few serious requests for 2400 baud, but we have no current plans (read: funds) to upgrade further. We operate on an Atari 800XL with 256k upgrade, 256k MIO, 10 MEG hard drive, SpartaDos and BASIC XE using M-5 BBS Software. The system equals and surpasses many ST and IBM systems for features and ease of use.

Over 500 files for ST and 8bit Atari machines are online, sorted and described in five sub-indexes. By the time you read this, there should be a powerful sort system allowing preselection by machine, date of upload, etc.

Credits

I want to give special thanks to those who have helped make the CHAOS BBS what it is: John Baker, for several years our BBS librarian, who set a standard of quality in file selection and index description that has been hard to match. Gary Ferris, our current 8bit Librarian, and Joe Kleinschmidt, our current ST Librarian, who are trying to dig out of John's big shadow. Also my sister-in-law Sally Nagy, who helped *a lot* with both ST and 8-bit file support. Barry Schroeder and Mike Clewley, who ran the CHAOS BBS until I took it in '85. Claus Buchholz, who developed the first do-it-yourself memory upgrade even before the 130XE was introduced, and made CHAOS the nationally known main outlet of Upgrade info. Ron Kovaks, whose weekly ZMAGazine is on over 300 BBSes around the country and is a popular feature at CHAOS. And Matthew Singer, whose public domain FOREM BBS program was a good enough beginning to allow me to develop it into what has become the M-5 SYSTEM software. It is now being used at several major club BBSes around the country. Without the outstanding efforts of these and other contributors, the CHAOS BBS would be just another number.

The Future

Due to requests from growing numbers of ST users, the ASCII mode on the CHAOS BBS is now 80 column. The only ASCII users that are likely to be dissapointed are our (very few) Commodore users, as Atari 8bit users should be using ATASCII to get full graphics and 40-column screens. ANSI color graphics support for ST, IBM, Amiga, etc. users is in development. Look for improved Email and *private* file transfer services in the next months, allowing user A to leave a file or program for user B to take then delete, via private mail with file attached for download.

As our club funds are short, any thoughts of going multi-line/multi-user are not feasable at this time, although the M-5 software could handle it. As a result, we are taking steps to see that club members get access and privileges that reflect their contribution to CHAOS. This is difficult at times due to the national profile our BBS has gained. We do not wish to limit our distant users, as we get much needed information and uploads from these users. Please let us know if you have any ideas on this issue. Meanwhile, remember that Tuesday and Wednesday nights, weekdays before 8 p.m. and after 1 a.m. and weekends before 2 p.m. are your *best shot* at finding CHAOS waiting for your call... don't let the busy signal scare you away! Watch for an announcement at the meetings of a special demo/tutorial session for using the CHAOS BBS. You, too, can navigate the system like a pro. Til next time, see ya in chat!

GENESEE ATARI GROUP

Serving the Flint area

President's Report

by Jerry Cross

Not much new stuff to report this month. Just a short reminder that the January meeting will have a guest speaker. Mike Clayton, author of the Yemacyb color picture dump program and utilities, will stop by to show some of his latest projects, and demo the Yemacyb program. Try to attend.

The new catalog is finally finished and should be mailed out in the next few weeks. The added time is necessary because they need to be xeroxed a little at a time. The cost to have them printed professionally is a bit high for our tiny club, even with a fat budget! The current catalog will have over 40 pages of Atari 8-bit and ST public domain programs!

Also, in the next few weeks the entire GAG library will be available at the Sy-Draft store, located on Corunna road east of Linden. If you find it inconvenient to attend the meetings, and would like to purchase a GAG disk, just stop by. You must supply your own disk, or purchase them from Sy-Draft. The price per disk is $2.50 for either the 8-bit or ST disks. Non-members can also purchase disks for $5 each. The Michigan Atari Magazine can also be purchased there. Sy-Draft has agreed to give all proceeds back to the club.

We will also be putting together some special disks for sale by Sy-Draft. These will be public domain disks containing the best of the best in our library. This is done by several groups around the country, and has been a huge success. Non-members will also be able to purchase these disks.

On to other stuff, Matt Howe has begun his Basic classes. If you are interested in joining, check with Matt to find out the schedule. The club has received an offer from Antic for special rebates on the purchase or renewal of Antic with the Disk Magazine.

Regulary $79.95, our club will receive $25 back, which we will then refund back to you. Your total cost for the subscription will then be only $54.95! If you have been considering purchasing this magazine, now is a great time to do it. In order for us to take advantage of this deal, we need four orders by February 1. If interested, contact Jerry Cross at 736-4544. That's it for now. Start searching your computer rooms for old software and hardware. February is swap meet time! Meeting dates:

January 13 General meeting
January 23 Workshop
February 10 General meeting (swap meet)
February 27 Workshop

Disk Library

By Ed Kalush

This month is a request for programs. The library is very large, and has most every type of software. What we are lacking is good programs from our group. Trading among groups is a preferred source, but we need our own programs to trade. Dave Petit has been busy converting PS icons to Atari format, but other than that we haven't much to offer. There are still many disks that Jerry collected from all over the world. You will see these in the future. So for the winter months, let's get to the keyboards. You'll receive a free disk for a good program (beat that!).

I have a personal need for a fast character to screen program. It needs to be able to put 4 characters (2 over 2) on the screen and move randomly and smoothly. Specifically needed for my BUNK program for the dice routine. Any help (from anyone) will be appreciated. This program is on disk 146.

As for our library, hope you liked last month's disks... let me know. Want to see something else? Maybe you have one you like... please tell me about it. I'm still behind, w/cruise and holidays, but will have this job under control by 1988 (I hope). There will be something ready for our meeting, so come looking. Until next month...live long and program!

GKAUG GREATER KALAMAZOO ATARI USERS GROUP

GKAUG meets the second Saturday of each month at 11:00 in Dewing Hall on the Kalamazoo College campus. Dues are $20/yr.

GRASS

GRAND
RAPIDS
ATARI
SYSTEMS
SUPPORTERS

President	George Nosky 2440 Parkridge S.E. Grand Rapids MI 49506 616 942 1527	Secretary	Charles Baughman 2069 Fawn Middleville, MI 49333 (616)795-7373

→

Meeting News

We had another good turn out at our December meeting (35-40 members). It sure looks good to see so many interested members sharing information.

George reported that the treasury has about $135 (disk sales etc. not in his report) but we have to pay for a renewal of the Analog magazine and the newsletter fee is due for Jan. and Feb. before the next dues are collected. A short discussion about our new dues structure was tabled until the Jan. meeting.

Chris Pelton gave us a fine demonstration of the Atari ST. The Jan. demo will be "text" adventures. There seemed to be a lot of interest in the new additions to our library. Come to a meeting, pay your $3.00 and pick up a catalog.

Steve explained about FLASH! and other BBS things. He also placed in nomination the following: President: George Nosky; V.P.: Marvin Waid and Gery Heitz; Sec.,Lib.: Chuck Baughman. We will take nominations from the floor before voting at the January meeting. George said that about half of the questionnaires have been returned and he will be compiling them soon, so please turn yours in if you haven't already done so.

Discussion about a local Atari fair was tabled until the next meeting. Information about a bargain on paper, and MERIT and how to use it, was distributed to the members present at the meeting. It was also announced that the price of blank disks will be $.50 as long as the supplier doesn't charge us more. We are also looking at the possibility of exchanging info and disks with a person from Poland. This is a brother of one of our members.

GRASS seems to be more exciting and interesting with every meeting. Plan to attend the next meeting and vote. The future of GRASS is being decided at these meetings. We need your input.

M.A.C.E. Journal

From the President

by Don Neff

MACE members who missed the December meeting also missed a good party. We had gifts for every member, lots of cake and cookies, and soft drinks to wash them down. The highlight of the evening was the Midi-Maze battle on eight Atari ST computers. People playing Midi-Maze didn't want to stop long enough to pick up their gifts or eat any goodies! Thanks to the great Atari vendors who support MACE, we gave away thousands of dollars worth of gifts at the meeting. The gifts they donated ranged from Atari Mugs to Modems and great Software!

Most of the people who braved the threatening weather to attend were glad they did because of the fun they had. I want to thank our sister club, Washtenaw Atari Users' Group (WAUG), who helped the MACE ST SIG set up the Midi-Maze game under the guidance of Bruce Urbanski. Mike Olin, Bill and Pattie Rayl and Bob Retelle loaned their STs to MACE for the event.

East side members will be happy to know that MACE East (978-1685) is back up at 300/1200 baud. We will also have a board in the South area about mid-January.

The following is an alphabetical list of the generous supporters who donated gifts to our Christmas party. Please patronize them and mention that you are from MACE: Michtron, Nova Computers, Rentertainment, Sector One, Soft House, Software Trends, Sy Draft, United Computer, Voice BBS (532-8410).

General Membership Meeting 12/15/87

The December "Christmas Party" meeting of MACE was held at the Southfield Civic Center. President Don Neff called the meeting to order at 7:30 pm. Don complimented the publishers of Michigan Atari Magazine and noted there were not many articles submitted by MACE members.

Some members asked how articles should be submitted, and Don said they can be uploaded to MACE WeST (582-0657) or Molin's Den (420-0407) or The Treasure CheST (973-9137). Hardcopy and disk-based articles may be submitted to Pattie Snyder-Rayl (MACE Journal Editor) or to any officer.

Don announced MACE East BBS (AMIS) will be back online starting January 1. Member Mike Lechkun will operate the system in Warren, using the number MACE East used to run on several years ago -- 978-1685. Don said, starting in January, there will be a MACE South BBS operating on an ST (FoReM software) run by Ed Hanson, chair of the MACE ST SIG. The number for this BBS will be 675-4660. Don also announced special thanks to United Computer for the loan of the Avatex 2400 modem used on MACE WeST BBS.

Several members of the ST SIG and some members of

WAUG brought their ST hardware to set up a MIDI ring so members could play MIDI-MAZE. Many players became so engrossed in the game they did not even hear their names being called in the prize drawings! The next general membership meeting will be held Tuesday, Jan. 19 at 7:30.

Michael Olin
MACE Rec. Sec'y

1988 MACE MEETING DATES

Officer Meeting	General Meeting
Jan. 8Jan. 19	
Feb. 5	Feb. 16
March 4	March 15
April 8	April 19
May 6	May 17
June 10	June 21

All General meetings are held in room 115 of the Southfield Civic Center at 10 1/2 Mile Rd and Evergreen. Meetings begin at 7:30.

TRI-CITY ATARI GROUP

T.A.G. - SAGINAW, BAY CITY, MIDLAND

Next Meeting

The Tri-City Atari Users Group meets the second Saturday of every month at 2:00 pm at the Rudy Zauel Memorial Library on the corner of Shattuck and Center in Saginaw. Upcoming meetings are scheduled as follows:

January9, 1987 February 13, 1987

OFFICERS of TAG are as follows:

LeRoy Valley	President	686-6796
Marty Schmidt	Treasurer/Sec.	792-6029
Al Jennings	8-bit Disk lib.	790-1980
Steve Volker	ST Disk Lib.	793-2955
George Stuart	News Letter Ed.	892-7545

Club dues are $20.00 per year. For this fee you get the Michigan Atari Magazine. Support for both the 8-bits and the ST's, and full access to the club's public domain library. We currently have about 90 disks in the 8-bit library and 30 in the ST library. You an get copies of these disks AT NO CHARGE if you bring your own disk to copy on (time permitting) at the regular meeting. If you don't have a disk with you, you can get the 8-bit disks for $1.00 each and the ST disks for $2.00 each. Non-TAG members can get copies of the 8- bit disks for $2.00 each and the ST disks for $4.00 each. If you need to renew, do it now! If you haven't joined yet, then do it now!

Letter from the Prez

A new year has arrived, and along with it a brand new look for the Michigan Atari Magazine! I would like to extend a sincere thank you to Pattie Rayl on behalf of TAG for showing up at our meeting (even though she *knew* that we were hiding in the bushes with our eyes peeking out). The first issue (December) looked great, and every comment I heard was positive! Although the first newsletter didn't make it to our mailboxes on time, Pattie brought several sample issues. Just the fact that she took the time to visit us and get our comments gave us a good feeling. Keep up the good work Pattie (and Bill)!

Hot Flashes from the Future!

by George Stuart

It's the start of a new year, and a new chance to get organized, so in January we'll be demoing databases to help you get your stuff together. On the ST LeRoy will be demoing DB Master One, and he'll go through the basic construction of an application (this application is to be determined by *you,* so think hard before coming to the meeting).

Let's see I've tried Data Perfect, Data Manager, Synfile+ and Analog DataBase. I didn't like any of them because they seem too restrictive. All of them require predefined fields and records of a certain size. This may be fine for some, but some times I have more information to enter than anticipated. What I would really like is a database that is a cross between a word processor and a database. I didn't get one but I will demo a PD database called DataBase II. This program is written in Basic with some machine language subroutines. Hmm...I don't have the instructions so maybe if I list it to the printer?

Relics to Relish

The swap meeting, simply put, didn't happen. Too many people either didn't know about it or forgot, and there was very little to swap (or buy or sell or...). So the nicely laid out meeting agenda that was published last month was left on the wayside...Oh well.

Instead we just had a general Q&A and Bull session. Good buys on printers (like the Panasonic 1080i and 1091i, Model II from Computability) were discussed, along with other juicy tidbits. One of the big questions was "What has happened to Analog/ST Log? Are they still in business?" The answer is yes, they are still in business. Analog just posted a lengthy logon message on Delphi stating that they are still publishing (although rather late due to a new publisher), and that any missed issues would be added to your current subscription.

LeRoy mentioned that the new version of PC-Ditto is now shipping. Monochrome is now supported, along with hard drives and the mouse! Much discussion was held concerning the club losses on raffles. After much debating (and kicking, screaming and biting) it was decided to continue our raffles as we always have.

At the end of the meeting, our new ST disk librarian, Steve Volker, was kept busy making disks. Steve has done a *super* job in organizing our disks already, and I hope he continues with the enthusiasm he has shown so far!! At the next meeting, we will try to have copies of our library list available for members.

Expiration Notice

Remember, once your membership expires you'll receive *no* more issues of the Michigan Atari Magazine!

8-bit Equipment Volunteers

Gerry Reno	Monitor
Nelson Greene	Disk Drive
Club Equipment	800XL

ST Equipment Volunteers

Bryant LeFreniere	Monitor
Paul Bork	520ST & Disk Drive

Once again, a big *thanks* to all of you who loan your equipment to the club. *please,* if you're going to be late, or can't make it, *call!!* It's not fair to the rest of the people when there's no monitor, or drive for the system!

WASHTENAW ATARI USERS' GROUP

From The Prez...

In the 5+ years that I have now been playing and working with Atari computers, I cannot think of any one word that encompasses more subject matter than *telecommunications.* I vividly remember the day I came home with my first modem, and can't recall ever feeling more nervous about any other peripheral device I had previously acquired for my hobby. Printers were just machines that left ink on paper, and light pens were glorified joysticks. But a *modem!* What could possibly be more mysterious that this one device? (And what did all those terms like Baud, Duplex, Parity and CARRIER mean?)

Nervousness fell to impatience, so I dove in head first. All stores at that time were willing to sell me a modem, but none had a system set up to show how to use one and I was not so fortunate to know anyone who had previously used modems. I was reduced to reading manuals in order to make it work, which is not the most advisable approach – one look at the Atari 850 Manual is enough to scare the bejeebers out of any novice! I muddled through, somehow, got the thing to dial a number the salesman had given me and found myself staring as my cursor moved in rows across my monitor "painting" what I would later know as the Baudville Welcome Screen.

Those of you who wish to take an easier route will be glad to know there is a simpler alternative: attend the Jan. 12 meeting of WAUG! where we will demonstrate the popular terminal programs for the ST and 8bit Atari computers. If all goes well, there will also be discussion of the Merit Computer Network (the state-wide communications system which links Michigan's major universities) and "pay-as-you-go" services such as CompuServe, GEnie and PC Pursuit.

It won't take you long to discover the only difficult thing about *telecommunications* is spelling it. There's a whole new world of wonderful things awaiting you and your computer "out there," and you won't likely ever regret getting started. See you on the 12th! Click.... NO CARRIER

Michael Olin
WAUG! President

General Meeting 12/8/87

This was our Christmas Party! ... therefore nothing useful was done, but we had a lot of fun. The majority of the meeting consisted of many games of Midi-Maze, with a constantly changing set of players. We had six ST's connected up to one another for this, and all I remember of it was that I got blasted far more often than I blasted anyone else. For the 8bit world, we had Flight Simulator running, but I don't recall anyone performing a successful landing!

However, two lucky members got to walk out of the meeting as proud new owners of the above two programs. The raffle that resulted in this was not without its own excitement: The winner of Midi-Maze was the person drawing names out of the bag! Then the first two names pulled for Flight Simulator were WAUG! officers who gave up their claims so the game could go to a non-officer (all in the spirit of the season, we presume). Also, two disk notchers and two 3.5 inch disk cases were given away. Next month's topic: Telecommunications, January 14!

Classifieds

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MEETINGS: Regular monthly meetings are held at 7:30pm, on the 3rd Tuesday of every month. We meet in room 115 of the Southfield Civic Center, Evergreen and 10 1/2 mile road, Southfield, michigan. Typical meeting programs consist of XL/XE and ST demos, tutorials and interesting group discussions on any Atari subject.

DISK LIBRARIES:Our ST library contains more than 170 disks and is growing rapidly.

We have one of the largest XL/XE disk libraries in the world (over 500 disks!) which includes one of the largest collections of Print Shop icons (17 disks) and utilities. A complete catalog of this library is available on disk for $2.

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MACE JOURNAL: Our club magazine, "THE MACE JOURNAL", is one of the most widely read and quoted Atari related publications available. In fact, we are proud to be one of the clubs selected by Unicorn Publications for inclusion in their fine magazine, "MICHIGAN ATARI MAGAZINE". By special arrangement with Unicorn, our members now receive a free subscription ($18 value) to this magazine with their $20 MACE membership! Each month the magazine features informative Atari articles, interviews, reviews, happenings, news items, hardware and software tips, as well as club news from 9 Michigan Atari user groups.

TELECOMMUNICATIONS: We operate 3 BBS's for general public use. Our main board, MACE West (582-0657, ASCII only), operates at 300/1200/2400 baud and supports both 8-bit and 16-bit users. MACE East (978-1685) operates at 300/1200 baud and supports mainly 8-bit users, although 16-bit users are welcomed too. Our south board (675-4660, ASCII only) operates at 300/1200 baud and supports both 8-bit and 16-bit users. All of the MACE boards have message bases which are open to public use and viewing.

COMPUTER HELP: MACE has many members who are experts in Atari computers and programs. No matter what type of Atari related questions you have, we probably have several members who can answer them at our meetings.

If you are a new user who just entered the world of computers, we can help you get started and guide you as you progess. If enough new users are interested, we will sponsor classes to teach you how to use your Atari comfortably.

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